



U.S. Department
of Transportation

**National Highway
Traffic Safety
Administration**

400 Seventh Street, S.W.
Washington, D.C. 20590

Dear Crash Data Researchers/Users:

Thank you for choosing crash data from the National Highway Traffic Safety Administration (NHTSA) for your research or other use. The information contained in this motor vehicle crash report is collected, maintained and distributed in accordance with Public Law 89-564. In accordance with this Public Law, NHTSA is required not to release any case information until completion of quality control procedures. These procedures include a review of the case material to extract all names, licenses and registration numbers, non-coded interview material, non-research related researcher comments in the margins, non-factual data, and the production number portion of the vehicle identification number (VIN).

If you requested NHTSA to query its database files in order to identify a specific crash, then that query was made using non-personal descriptors you provided for use in our search. This motor vehicle crash may have been identified from a data search and matches the general, non-personal descriptors you provided, but we cannot confirm that this is the specific crash report you requested.

If you have any questions with regard to the above procedures, please contact the Field Operations Branch, Crash Investigation Division, National Center for Statistics and Analysis at 202-366-4820. Again, please be advised that we cannot confirm that this is the case that you have specifically requested nor can we certify the information to be correct.

*** *** ***



AUTO SAFETY HOTLINE
(800) 424-9393
Wash. D.C. Area 366-0123

**TRANSPORTATION SCIENCES CENTER
ACCIDENT RESEARCH GROUP**

Calspan SRL Corporation
Buffalo, New York 14225

CALSPAN ON-SITE AIR BAG DEPLOYMENT INVESTIGATION

CALSPAN CASE NO. CA96-07

**VEHICLE #1 - 1996 FORD CONTOUR GL (AIR BAG EQUIPPED)
VEHICLE #2 - 1983 LINCOLN CONTINENTAL MARK VI**

LOCATION -

CRASH DATE - 1996

Contract No. DTNH22-94-D-07058

Prepared for:

U.S. Department of Transportation
National Highway Traffic Safety Administration
Washington, D.C. 20590

DISCLAIMER

This document is disseminated under the sponsorship of the Department of Transportation in the interest of information exchange. The United States Government assumes no responsibility for the contents or use thereof.

The opinions, findings, and conclusions expressed in this publication are those of the authors and not necessarily those of the National Highway Traffic Safety Administration.

The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points are coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

TECHNICAL REPORT STANDARD TITLE PAGE

1. <i>Report No.</i> CA96-07	2. <i>Government Accession No.</i>	3. <i>Recipient's Catalog No.</i>	
4. <i>Title and Subtitle</i> Calspan On-site Air Bag Deployment Investigation Vehicle #1 - 1996 Ford Contour GL compact utility Vehicle #2 - 1983 Lincoln Continental Mark VI Location -		5. <i>Report Date:</i> 1997	
		6. <i>Performing Organization Code</i>	
7. <i>Author(s)</i> Accident Research Group		8. <i>Performing Organization Report No.</i>	
9. <i>Performing Organization Name and Address</i> Transportation Sciences Center Accident Research Group Calspan SRL Corporation P.O. Box 400 Buffalo, New York 14225		10. <i>Work Unit No.</i>	
		11. <i>Contract or Grant No.</i> DTNH22-94-D-07058	
12. <i>Sponsoring Agency Name and Address</i> U.S. Department of Transportation National Highway Traffic Safety Administration Washington, D.C. 20590		13. <i>Type of Report and Period Covered</i> Technical Report Crash Date: 1996	
		14. <i>Sponsoring Agency Code</i>	
15. <i>Supplementary Notes</i> On-site investigation of a dual air bag deployment crash in which the right front occupant sustained fatal injuries as the result of contact with the passenger side air bag module cover and air bag.			
16. <i>Abstract</i> <p>An on-site investigation was conducted into a two vehicle, turn across path intersection crash between a 1996 Ford Contour GL (Vehicle #1) equipped with dual front air bags and a 1983 Lincoln Continental Mark VI (Vehicle #2) which occurred in the month of 1996. Vehicle #1 was traveling south in the second travel lane of a six lane divided, dry, level asphalt, urban roadway when it struck the right side of Vehicle #2 which was traveling northbound and attempted to make a left turn, crossing from left to right across Vehicle #1's travel path.</p> <p>Driver #1 attempted to avoid the crash by applying the brake to a locked wheel condition and skidded 8.5 m (21.6') prior to the point of impact (POI). The entire frontal plane of Vehicle #1 contacted the right side plane of Vehicle #2 resulting in a CDC of 11-FDEW-1 for Vehicle #1 and 02-RZEW-3 for Vehicle #2. Vehicle #1 sustained a SMASH computed delta V of 17 km/h (10 mph) while Vehicle #2 experienced a 12 km/h (7 mph) delta V.</p> <p>The thirty-five year old female driver and the right front occupant in Vehicle #1 were not using the available three point manual lap and torso belt prior to the crash. The seven year old right front male occupant, who was 121.9 cm (48.0") tall and weighed 22.7 kg (50.0 lb.), moved forward toward the instrument panel in response to vehicle braking. He was in close proximity to the windshield when the air bag system began its inflation sequence. The passenger side air bag module cover rotated upward and contacted his neck and underside of the chin which entrapped his head against the windshield. The expanding passenger side air bag subsequently contacted his neck, and chest. This interaction of the air bag on the boy's chest and the entrapment of his neck by the air bag module cover resulted in a leverage action which resulted in a near decapitation type injury. The medical examiner described the injury to the neck as a blunt chopping injury with the head levered off the neck at the atlanto-occipital joint. The boy's body moved upward and rearward with his head striking the windshield header. His body subsequently rebounded toward the center console area where he came to rest with his head laying on the floor behind the console and his buttocks on the center console with his chest facing upward.</p> <p>Driver #1, who was the mother of the right front occupant, was not injured in the crash. However, she was transported to the hospital where she was admitted for shock. Driver #2, who was a 60 year old, 190.5 cm (75.0") tall, and 115.7 kg (255.0 lb.) male, was not injured in the crash.</p>			
17. <i>Key Words</i> Passenger side air bag, air bag module cover Near decapitation AIS-6 (Maximum) level injury Two vehicle intersection crash		18. <i>Distribution Statement</i> General Public	
19. <i>Security Classif. (of this report)</i> Unclassified	20. <i>Security Classif. (of this page)</i> Unclassified	21. <i>No. of Pages</i>	22. <i>Price</i>

TABLE OF CONTENTS

Background	1
Summary	1
Vehicle Schematic	4
Crash Demographic Data	5
Ambience	5
Highway	5
Traffic Controls	6
Vehicle #1 Description	6
Vehicle #2 Description	7
Vehicle #1 Exterior Damage	7
Vehicle #1 CDC	8
Vehicle #1 Interior Damage	8
Vehicle #2 Exterior Damage	9
Vehicle #2 CDC	9
Vehicle #2 Interior Damage	9
Supplemental Restraint System (SRS)	10
Vehicle Velocity Estimates	12
Collision Sequence	12
Human Factors/Occupant Data	14
Injury Data	15
Occupant Kinematics,	17
Appendix A: Selected Photographs	A-1
Appendix B: SMASH Algorithm	B-1

CALSPAN ON-SITE AIR BAG DEPLOYMENT INVESTIGATION**CALSPAN CASE NO. CA96-07****VEHICLE #1 - 1996 FORD CONTOUR GL (AIR BAG EQUIPPED)****VEHICLE #2 - 1983 LINCOLN CONTINENTAL MARK VI****LOCATION -*****Background***

The National Highway Traffic Safety Administration (NHTSA) was notified of a fatal crash involving an unrestrained right front passenger who was reportedly sustained fatal injuries from the deployment of a passenger side air bag. The initial notification was received at Calspan from a National Accident Sampling System Primary Sampling Unit (NASS PSU) the day after the crash and was immediately forwarded to the Field Operations Branch of the NHTSA. A Calspan Reconstructionist was assigned to the case and arrived on-site the following day. The crash occurred in the month of 1996.

The air bag equipped vehicle was initially towed to a collision shop where an appointment to inspect the vehicle was established. Upon arrival, the Calspan Reconstructionist was informed by the police department that the inspection of the air bag vehicle would be delayed two days in order to accommodate the arrival of all interested parties which included the National Transportation Safety Board (NTSB) and a representative from the Ford Motor Company. The air bag vehicle was relocated by the police to the police impound lot at the request of the NTSB investigator.

Team members from a nearby (NASS PSU) also joined the air bag vehicle inspection at the invitation of the SCI COTR. All parties were present during the inspection of the air bag vehicle. The interior and exterior evidence appeared to be undisturbed as verified by on-scene police photographs.

SUMMARY

An on-site investigation was conducted into a two vehicle, turn across path intersection crash between a 1996 Ford Contour GL (Vehicle #1) equipped with dual front air bags and a 1983 Lincoln Continental Mark VI (Vehicle #2) which occurred in the month of 1996. Vehicle #1 was traveling south in the second travel lane of a six lane divided, dry, level asphalt, urban roadway when it struck the right side of Vehicle #2. Vehicle #2 was traveling northbound and attempted to make a left turn, crossing from left to right across Vehicle #1's travel path.

The driver of Vehicle #1 attempted to avoid the crash by applying the brake to a locked wheel condition and skidded 8.5 m (21.6') prior to the point of impact (POI). The entire frontal plane of Vehicle #1 contacted the right side plane of Vehicle #2. Contact on Vehicle #2 began at the leading edge of the right rear door and ended at the right rear fender.

Vehicle #1 came to the final rest position (FRP) in the intersection. Driver #1 apparently panicked and subsequently drove the vehicle approximately 20.4 m (67.0') onto the southwest sidewalk. Vehicle #2 rotated in a counterclockwise direction and came to the FRP in the intersection approximately 10.0 m (32.8') from the POI.

Vehicle #1 sustained a maximum crush of 5.0 cm (2.0") on the bumper reinforcement bar located 24.0 cm (9.4") right of the vehicle centerline. The maximum crush to Vehicle #2 measured 25.1 cm (10.0") and was located along the rub strip on the right rear door. The delta V computed by the SMASH program was 17 km/h (10 mph) for Vehicle #1 and 12 km/h (7 mph) for Vehicle #2. The trajectory algorithm of the SMASH program computed Vehicle #1's impact speed at 26 km/h (16 mph) and 34 km/h (21 mph) for Vehicle #2. The Supplemental Restraint System (SRS) appeared to function properly.

The thirty-five year old female driver and the right front occupant in Vehicle #1 were not using the available three point manual lap and torso belt prior to the crash. The seven year old right front male occupant, who was 121.9 cm (48.0") tall, 22.7 kg (50.0 lb.), moved forward toward the instrument panel in response to vehicle braking. His head was in close proximity to the windshield as the air bag system began its inflation sequence.

The passenger side air bag module cover rotated upward toward the windshield and contacted the boy's neck and underside of the chin. The module cover held him against the windshield while the expanding air bag contacted his chin, neck, and chest. This interaction of the air bag and module cover resulted in a leveraging action which separated his head from his torso in a near decapitation type injury. There was only a small amount of tissue at the posterior aspect of the neck attaching the head to the torso. The medical examiner described the injury to the neck as a blunt chopping injury with the head levered off the neck at the atlanto-occipital joint. There was no observable injury to the spinal column.

The boy's head then moved in an upward/rearward motion and struck the windshield header which was noted by strands of hair embedded in the fabric covering over the windshield header. He suffered a small contusion of the scalp over the right parietal occipital area which was attributed to this contact. He came to rest between the front bucket seats with his head on floor behind the center console, his buttocks on the console surface with his chest facing upward.

The autopsy report indicated that the brain did not exhibit any lesions although a film of blood was noted over its surface. A vertically oriented striation abrasion pattern on the boy's forehead at the hairline was noted which was attributed to contact with the windshield. There was a broad abrasion under the chin which extended onto the jowls resulting from contact with the expanding passenger side air bag. Both lungs sustained tiny hemorrhagic areas along the frontal and side surfaces which the medical examiner believed to be the result of flexing of the ribs by

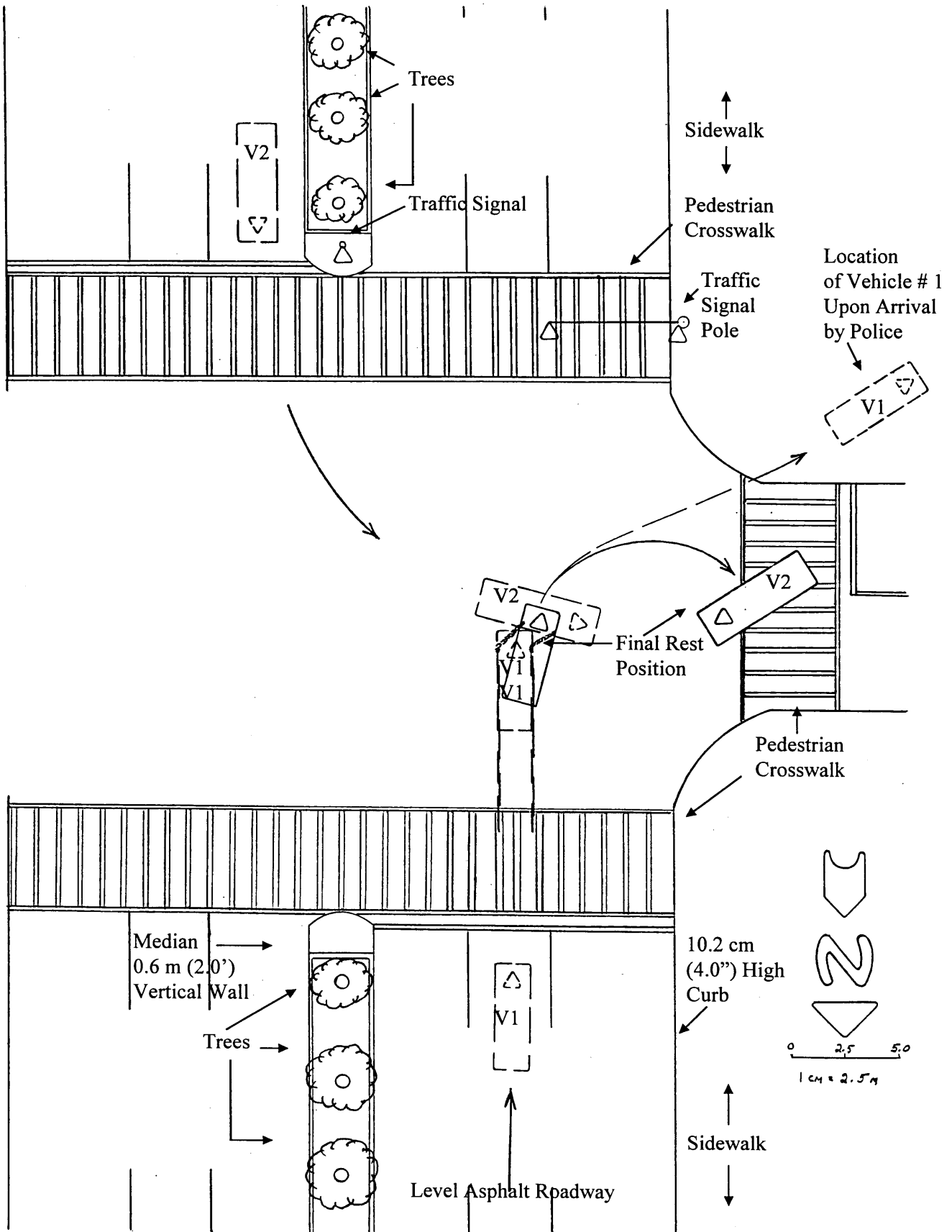
the expanding passenger side air bag. The ribs were not fractured. There were no other injuries to the abdominal region or lower extremities.

The passenger side air bag was a top mount design with two parallel tethers which extended 90.2 cm (35.5") from the neck of the air bag module to a lateral seam line on the front surface of the air bag. The front surface of the air bag exhibited significant tissue transfer, clothing transfer, and bodily fluid deposits over an area that measured 49.5 cm (19.5") in length and 6.4 cm (2.5") in width. The bodily fluid deposit had a patterned appearance which may have resulted from contact on the anterior aspect of the right front occupant's spinal column during air bag inflation.

The driver, who was the mother of the right front occupant, was not injured in the crash. However, she was transported to the hospital where she was admitted for shock.

Driver #2, a 60 year old male who was 190.5 cm (75.0") tall and weighed 115.7 kg (255.0 lb.) was not injured in the crash. He reportedly did not see Vehicle #1 prior to the crash and described the sensation of the impact as similar to a slap on the shoulder. He exited his vehicle and was going to inquire on the welfare of the other driver when a crowd gathered and forced him to stay with his vehicle. The police escorted the driver to the local precinct in order to protect him from the crowd.

Crash Scene Schematic
Calspan Case No. 96-07



CRASH DEMOGRAPHIC DATA	
Location:	Intersection of a six lane divided roadway
State:	
Area/Type:	Urban/Businesses
Investigating Police Agency:	Local Police Department
Accident Type:	Two vehicle turn across path collision (i.e., front to right side impact)
Injury Severity: Air Bag Vehicle Driver	Not injured, police reported driver was in shock
Injury Severity: Air Bag Vehicle Right Front Passenger	AIS-6 (Maximum)
AMBIENCE	
Viewing Conditions:	Daylight
Weather:	Clear/Sunny
Road Surface:	Dry
HIGHWAY	
Type:	Major urban collector
Number Of Lanes:	6 (3 lanes northbound, 3 lanes southbound)
Width:	13.7 m (45.0') northbound travel lanes
Surface:	Asphalt
Median:	3 m (10') wide, 0.6 m (2.0') high wall divider
Edge:	West roadway edge, 2.4 m (8.0') wide parking lane with a 10.2 cm (4.0") high curb, median wall adjacent to east roadway
Vertical Alignment:	Straight
Horizontal Alignment:	Level
Estimated Coefficient Of Friction:	0.60
Traffic Density:	Light to moderate

TRAFFIC CONTROLS	
Signals:	Traffic lights which had a green light timing sequence of 50 seconds north/southbound and 35 seconds east/west bound.
Signs:	None
Markings:	Broken white lane lines in good condition preceding the intersection boundary for both travel directions which terminated and began at the 4.6 m (15.0') wide delineated pedestrian crosswalks.
Speed Limit:	56 km/h (35 mph)
VEHICLE #1 DESCRIPTION	
Description:	1996 Ford Contour GL.
V.I.N.:	3FALP6535TM (Serial# omitted).
Color:	Medium blue
Odometer:	4,033 km (2,506 miles).
Engine:	2.0 L.
Transmission:	Automatic.
Steering:	Power.
Brakes:	Power assisted front wheel disc and rear drum brakes.
Padding:	Soft edge steering wheel rim, sunvisor, seats, roof liner, center console, door panels and arm rests.
Active Restraints:	3-point lap and shoulder belts in all four out-board seating positions, lap belt in the second row center seat position.
Passive Restraints:	Driver side and passenger side Supplemental Restraint System (SRS) which deployed upon impact with the right side of Vehicle #2.
Defects:	None.
Tow Status:	Towed from the scene due to damage.

VEHICLE #2 DESCRIPTION	
Description:	1983 Lincoln Continental Mark VI.
V.I.N.:	1MRBP99F5DY (Serial# omitted).
Color:	Dark blue.
Odometer:	262,651 km (163,208 miles).
Engine:	5.0 L.
Transmission:	Automatic.
Steering:	Power.
Brakes:	Front disc and rear drum brakes.
Padding:	Soft edge steering wheel rim, upper and mid instrument panel, sunvisor, seats, roof liner, door panels and arm rests, seats and seat arm rest.
Active Restraints:	3-point lap and shoulder belts in the two outboard front seat positions, a 2-point lap belt in the center front and three 2-point lap belts in the rear seat positions.
Passive Restraints:	None
Defects:	None.
Tow Status:	Driven from the scene.

VEHICLE DAMAGE

Vehicle #1

Exterior:

The frontal plane of the 1996 Ford Contour GL struck the right side plane of the 1983 Lincoln Continental Mark VI. Direct contact was noted across the entire front bumper surface which measured 144.0 cm (56.7"). The front bumper reinforcement bar sustained a maximum rearward displacement of 5.0 cm (2.0"). Crush values obtained are listed below:

$C_1 = 1.0 \text{ cm (0.4")}$	$C_2 = 3.0 \text{ cm (1.2")}$	$C_3 = 3.0 \text{ cm (1.2")}$
$C_4 = 5.0 \text{ cm (2.0")}$	$C_5 = 5.0 \text{ cm (2.0")}$	$C_6 = 3.0 \text{ cm (1.2")}$

Components damaged in the crash included: the front bumper fascia, the grille; the right directional light lens, right front fender, and right front tire and the hood.

CDC: 11-FDEW-1

Repair Cost: Not available

Vehicle #1

Interior:

Damage to the interior was associated with occupant contacts and the air bag deployment event. The passenger side air bag module cover exhibited a serpentine profile along the leading edge which resulted from contact with the right front occupant's neck during deployment. The vertical rise in the cover along this edge measured 1.9 cm (0.75") and was located 11.4 cm from the left corner of the cover.

The passenger side air bag exhibited striated bodily fluid transfers located in the center of the air bag which measured 49.5 cm (19.5") vertically. These were the result of contact with the right front occupant's neck and spinal column. Black fabric transfers attributed to contact with the boy's jacket were also observed in the vicinity of these transfers.

The windshield glazing sustained a 25.4 cm (10.0") long slit which was located 12.7 cm below the windshield header and 38.1 cm (15.0") right of the vehicle centerline. This was the result of contact by the right front occupant's head during the crash sequence. The windshield also exhibited a wipe mark adjacent to the right upper A-pillar which was attributed to contact by the boy's right hand. A scuff mark attributed to the boy's right arm was noted on the in-board surface of the upper right A-pillar. Black hair fibers noted in the fabric covering over the windshield header located directly above the slit in the windshield were attributed to contact by the boy's head during the crash. There were scuff marks on the surface of the glove compartment door which were attributed to contact by the right front occupant's knees and lower legs.

The right front seat position at the time of inspection was in the full rearward adjustment position which appeared to be in this position at the time of the crash. Bodily fluid deposits on the seat cushion aligned with deposits on the center console which established the fact that the seat placement more than likely had not been moved from its position during the crash. The seat adjustment range measured 20.3 cm (8.0") from full rearward to full forward. The angle of the seat back support measured 29° rearward from vertical. The seat back support was located 96.5 cm (38.0") rearward of the passenger side air bag module cover measured at a height of 39.4 cm (15.5") above the junction of the seat cushion with the seat back support. The seat cushion measured 48.3 cm (19.0") in length with an incline of 19°. The leading edge of the cushion measured 25.4 cm (10.0") above the floor.

The windshield header extended 33.7 cm (13.25") rearward from the leading edge of the passenger side air bag module cover (i.e., edge closest to the occupant) and measured 50.8 cm (20.0") above the module cover. The rake angle of the windshield measured 30.5°.

The right front seat cushion and in-board surface of the seat back support exhibited heavy concentration of bodily fluid artifact which continued onto the center console and in-board side surface of the driver's seat back support. This artifact established the final rest area for the right front occupant's upper torso.

The steering column was fixed and measured an angle of 20° from horizontal. The steering wheel rim was not deformed. Scuff marks were noted on the driver side knee bolster which were attributed to contact by the driver's knees. There was a scuff mark on the left side of the instrument panel along the edge of the eyebrow which was attributed to contact by the driver's left arm.

A red cosmetic transfer (i.e., lipstick) was noted on the driver side air bag. It was located near the center and was the result of contact by the driver's facial area during the air bag deployment sequence.

Vehicle #2

Exterior:

The right side plane of Vehicle #2 was struck by Vehicle #1. The length of direct along the right side plane measured 226.1 cm (89.0"). The crush pattern began at the leading edge of the right rear door and continued rearward to the right rear bumper corner. The maximum crush of 26.7 cm (10.5") was located on the right rear door surface which was 236.2 cm (93.0") rearward from the right front axle.

Measured crush values for the right side plane are listed below:

$C_1 = 0 \text{ cm}$	$C_2 = 4.4 \text{ cm (1.75")}$	$C_3 = 5.1 \text{ cm (2.0")}$
$C_4 = 22.9 \text{ cm (9.0")}$	$C_5 = 22.6 \text{ cm (8.9")}$	$C_6 = 0 \text{ cm}$

Components damaged in the crash included the rear bumper, the right rear quarter panel, and the right rear door.

CDC: 02-RZEW-3

Repair Cost: Not available

Vehicle #2:

Interior

Interior damage to Vehicle #2 was related to the intrusion resulting from the impact with Vehicle #1. The rear door panel and right lower C-pillar intruded into the right rear occupant

space 1.9 cm (0.75") and 5.7 cm (2.25"), respectively. There were no apparent driver contact points visible.

SUPPLEMENTAL RESTRAINT SYSTEM (SRS)

Vehicle #1

The 1996 Ford Contour GL was equipped with a driver side and passenger side air bag Supplemental Restraint System (SRS) that deployed as designed during the crash. The system was equipped with two crash sensors located on the upper radiator support bracket.

Restraint warning labels were present on both surfaces of both sunvisors advising the driver and right front occupant to wear the safety belts and to sit back away from the air bag. The labels visible on the sunvisors in the up position were printed with black lettering on a white background and stated "Air Bag, See Other Side". The labels on the flip side were also printed white on black with a yellow cautionary background at the top which read:

<p style="text-align: center;">CAUTION TO AVOID SERIOUS INJURY</p>

- For maximum safety protection in all types of crashes, you must always wear your safety belts.
- Do not install rearward-facing child seats in any front passenger seat position.
- Do not sit or lean unnecessarily close to the air bag.
- Do not place any objects over the air bag or between the air bag and yourself.

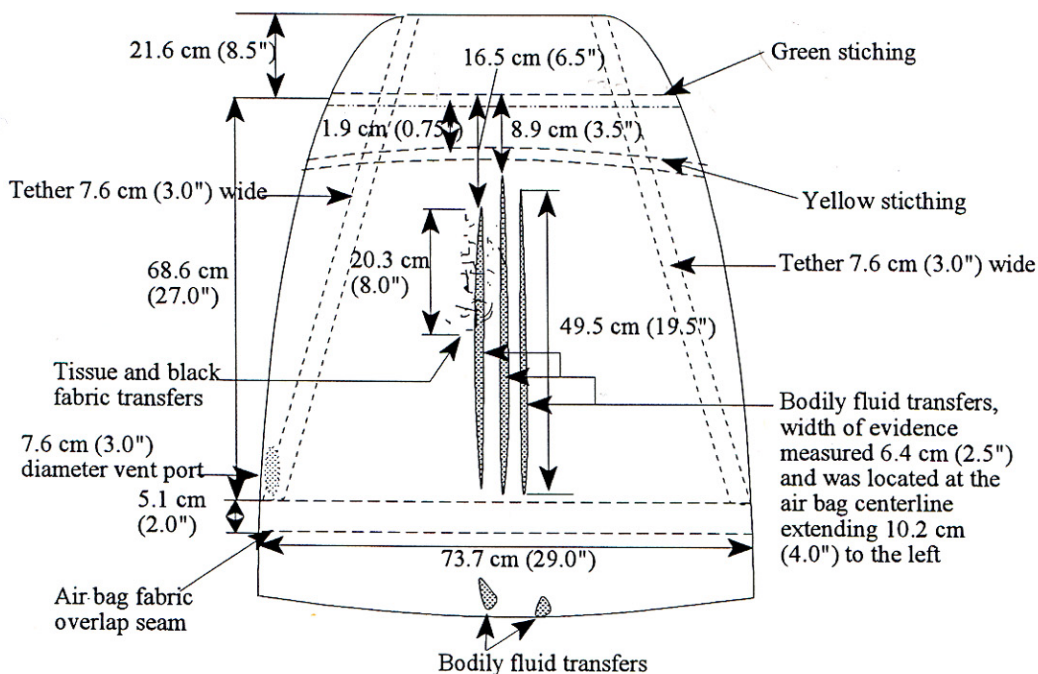
Passenger Side Air Bag

The right front passenger side air bag was a top mount design which incorporated a single air bag module cover. The cover was flush mounted to blend with the surrounding top surface and of the instrument panel and continued in a rounded transitional shape onto the vertical surface of the instrument panel. The leading edge of the cover was recessed from the vertical plane of the instrument panel 14.0 cm (5.5"). The trailing edge of the cover (i.e., edge adjacent to the windshield) was located 18.4 cm (7.25") from the windshield at the right corner and 27.9 cm (11.0") from the windshield at the left (in-board) corner. The left side of the module cover at the leading edge was located 22.2 cm (8.75") right of the vehicle centerline.

The air bag module cover measured 34.3 cm (13.5") laterally and 19.1 cm (7.5") longitudinally (i.e., front to back). The cover was constructed of stiff plastic with a metallic brace riveted to the underside along the leading edge. The leading edge was deformed in a serpentine profile resulting in a vertical rise of 1.9 cm (0.75") which was located 11.4 cm from the left corner of the cover. This deformation was attributed to contact with the right front occupant's neck and chin during the SRS deployment sequence.

The passenger side air bag was constructed with two tethers designed to limit the extrusion of the air bag into the occupant space while providing head and thoracic protection for the occupant. The tethers were located along the left and right side along the front surface of the air bag and attached along a common lateral seam line located 90.2 cm (35.5") from the air bag inflator unit. The tethers measured 7.6 cm (3.0") in width (refer to the following diagram).

Tethered Passenger Side Air Bag Vehicle #1



The air bag was constructed of a white color nylon fabric with a grid pattern weave. There was one 7.6 cm (3.0") diameter vent port located along the in-board side panel and slightly above the left tether attachment point. The air bag was 73.7 cm (29.0") wide along the common lateral seam for the tethers.

The passenger side air bag exhibited striated bodily fluid transfers located in the center of the air bag which measured 49.5 cm (19.5") vertically. These were the result of contact between the expanding air bag and the right front occupant's neck. Black fabric transfers attributed to contact with the boy's jacket were also observed in the vicinity of these transfers. There were two bodily fluid deposits noted at the bottom of the passenger air bag which were in-line with the striated bodily fluid transfer marks.

Driver Side Air Bag

The driver side air bag module cover opened in the typical "H" pattern during the deployment sequence along the designated tear seam lines. The vertical length of the upper module flap measured 6.4 cm (2.5") and the lower flap measured 7.0 cm (2.5"). The lateral width of the flaps measured 19.1 cm (7.5") along the common horizontal tear seam line. The flap thickness measured 4.7 mm (0.1875"). The module flaps did not exhibit any contact evidence.

The air bag was a four tethered design with two 2.5 cm (1.0") diameter vent ports located on the instrument panel side of the air bag in the twelve o'clock position. The air bag measured 58.4 cm (23.0") in diameter and the circumferential edge was stitched with a finished seam. The air bag identification number is listed as follows:

A red cosmetic transfer (i.e., lipstick) was noted on the driver side air bag. It was located 5.1 cm (2.0") right of center and 5.1 cm (2.0") below the center. This transfer was the result of contact by the driver's facial area during the air bag deployment sequence.

VEHICLE VELOCITY ESTIMATES

SMASH Algorithm	Vehicle #1	Vehicle #2
Travel Speed:	Unknown	Unknown
Impact Speed:	26 km/h (16 mph)	34 km/h (21 mph)
Total Delta V:	17 km/h (10 mph)	12 km/h (7 mph)
Longitudinal Delta V:	-16 km/h (-10 mph)	-7 km/h (-4 mph)
Lateral Delta V:	5 km/h (3 mph)	-9 km/h (-6 mph)
Energy Absorption:	10,914 joules (8,049 ft-lb.)	26,936 joules (19,865 ft-lb.)

The impact speed and velocity changes were computed using the damage and trajectory algorithms of the SMASH program.

COLLISION SEQUENCE

Pre-Crash:

Vehicle #1 was traveling south in the second travel lane of a six lane divided, dry, level asphalt, urban roadway when it struck the right side of Vehicle #2. Vehicle #2 was traveling northbound and attempted to make a left turn, crossing from left to right across Vehicle #1's travel

path. The driver of Vehicle #1 attempted to avoid the crash by applying the brake to a locked wheel condition and skidded 8.5 m (21.6') prior to the point of impact (POI).

Driver #1 and the seven year old male right front occupant were not using the available manual three point lap and shoulder belt prior to the crash. During the braking evasive maneuver, the right front occupant moved forward toward the instrument panel.

Crash:

The frontal plane of Vehicle #1 contacted the right side plane of Vehicle #2. Contact on Vehicle #2 began at the leading edge of the right rear door and ended at the right rear fender.

The unrestrained seven year old male occupant in the right front seat of Vehicle #1 contacted the windshield with his forehead as the air bag system began its inflation sequence. The passenger side air bag module cover contacted his neck and underside of the chin which held him against the windshield. The passenger side air bag subsequently contacted his neck and chest which propelled his upper torso rearward and upward.

The interaction of the air bag on the boy's chest and the entrapment of his neck by the air bag module cover leveraged his head from his torso resulting in a near decapitation type injury. His head then moved rearward and struck the windshield header which was noted by strands of black hair embedded in the fabric overlaying the windshield header. He came to rest between the front bucket seats with his head on floor behind the center console, his buttocks on the console surface with his chest facing upward. A heavy concentration of bodily fluid deposited on the center console substantiated this final rest position.

Post Crash:

Final Rest - Vehicle #1 came to the final rest position (FRP) in the intersection. Driver #1 apparently panicked and subsequently drove the vehicle approximately 20.4 m (67.0') onto the southwest sidewalk. Vehicle #2 rotated in a counterclockwise direction and came to the FRP in the intersection approximately 10.0 m (32.8') from the POI.

Driver Activities - The driver of Vehicle #1 exited her vehicle through the driver's door. She became hysterical and began to scream which drew a large crowd of spectators. Driver #2 exited his vehicle through the driver's door, but was prevented from assisting Driver #1 by the police. He was taken away by the police to a safe area and subsequently released.

Police Activities - The local police department responded within minutes of the crash. Their precinct was located two blocks from the crash scene. They investigated the crash and provided protection to Driver #2 who was under threat of hostile reaction by the gathering crowds.

Rescue Activities - An EMT team arrived within minutes of the crash as their station was located in the immediate area. The right front occupant of Vehicle #1 was transported from the

Scene Clearance - Vehicle #1 was initially towed from the scene to a local collision shop. It was subsequently towed to a police operated secured storage area pending this investigation. Vehicle #2 was driven from the scene and was inspected at a repair facility.

Human Factors/Occupant Data

Vehicle #1	Driver	Right Front Occupant
Age/Sex:	35 year female	7 year old male
Height:	Unknown	121.9 cm (48.0")
Weight:	Unknown	22.6 kg (50.0 lbs.)
Manual Restraint System Usage:	Not wearing the 3-point lap and shoulder belt system.	Not wearing the 3-point lap and shoulder belt system.
Usage Source:	Vehicle inspection.	Vehicle inspection and police information.
Eyewear:	Unknown	Unknown
Jewelry:	Unknown	Unknown
Clothing	Unknown	Black nylon bomber jacket, green/blue and white striped shirt, white T-shirt, maroon thermal undershirt, blue jeans, black sneakers. Medical examiner indicated that the clothing was stained with bodily fluids, but was not torn or exhibited patterned imprints.
Vehicle Familiarity:	Unknown	
Route Familiarity:	Very familiar, resident of area.	
Trip Plan:	Unknown.	
Type of Medical Treatment:	Admitted for shock	Expired at scene.

Vehicle #2	Driver
Age/Sex:	60 year old male
Height:	190.5 cm (75.0")
Weight:	115.7 kg (255.0 lbs)
Passive Restraint System Usage:	Wearing the 3-point automatic lap and shoulder belt system.
Usage Source:	Vehicle inspection.
Eyewear:	Corrective lenses
Jewelry:	None
Cargo:	None
Clothing	Unknown
Vehicle Familiarity:	Owned the vehicle for six years prior to the crash.
Route Familiarity:	Very familiar, route used daily to commute between the residence and place of employment.
Trip Plan:	Returning to residence from work.
Type of Medical Treatment:	None.

INJURY DATA

Vehicle #1

Right Front Occupant - 7 year old male

INJURIES	SEVERITY (AIS-90)	SOURCE
1. Near complete decapitation injury	311000.60	Passenger side air bag module cover and air bag

Supplemental discussion from the autopsy: The gaping transection was 10.2 cm (4.0") transverse and approximately 19.1 cm (7.5") in circumferential length. The transection extends through the upper neck, approximately at the level of the prominence of the thyroid cartilage. A broad band of abrasion extended from the edge of the mandible and through the submental skin toward the superior wound margin with some sparing of the skin immediately adjacent to the superior margin of the wound. The area of the abrasion broadens over the angle of the right mandible and extends up to the right earlobe, up to a width of approximately 6.4 cm (2.5") with the midline area of abrasion approximately 2.5 cm (1.0"). The lower wound margin is abraded between 1.3 cm to 8.9 cm (0.5"-1.5") skin margin; the broadest area of abrasion was noted at the right angle of the wound. The wound terminates in the posterolateral head to the torso.

The wound consisted of a near complete decapitation with complete transection of all soft tissues, vessels, nerves, larynx, posterior pharynx and posterior paraspinal musculature. Complete occipito-atlantal disarticulation was noted.

2-3. Patch abrasions posterior aspects of both ears	290202.11 290202.12	Passenger side air bag
4. Right occipito-parietal 6.4 mm (0.25") subscalpular contusion	190402.11	Windshield header
5. 3.8 cm x 3.2 cm (1.5" x 1.25") vertically oriented area of superficial abrasions of the forehead at the hairline	290202.17	Windshield
6. Inferior marginal abrasions of the anterior neck	390202.15	Passenger side air bag
7-8. Scant diffuse subarachnoid hemorrhage	140684.31 140684.32	Passenger side air bag and windshield
9. Abrasion of the right mandible	290202.11	Passenger side air bag
10. Petechiae on anterior aspects of both lungs	441499.33	Passenger side air bag

Driver #1 and Driver #2 were not injured in the crash. Although the police listed Driver #1 as being in a state of shock. She was transported to a local medical facility where she reportedly was admitted and treated for shock.

OCCUPANT KINEMATICS

Driver of Vehicle #1

At the time of the crash, the driver's seat was adjusted in a forward position between middle track position and full forward. The driver was not wearing the available three-point manual lap and shoulder belt. Just prior to the crash, the driver applied the brakes in a panic braking maneuver.

In response to this braking and impact forces, Driver #1 moved forward and came in contact with the deploying driver side air bag. A red cosmetic transfer (i.e., lipstick) was noted on the driver side air bag which was located near the center. Her left arm was propelled forward by the driver side air bag and contacted the eyebrow of the left instrument panel. A 12.7 cm (5.0") scuff mark was noted along the leading edge of the eyebrow which was located 35.6 cm (14.0") left of the vehicle centerline.

Two scuff marks on the driver side knee bolster indicated the driver's lower torso moved forward during the braking maneuver and loaded the knee bolster with both knees. The driver reportedly was in shock following the crash. It was not known whether she sustained any contact related injuries.

Right Front Occupant of Vehicle #1 (7 year old male)

The right front occupant moved forward during the braking avoidance maneuver and was in close proximity to the windshield where his head/neck were over the passenger side air bag module cover during the actuation of the SRS deployment sequence. The passenger side air bag module cover opened in an upward rotation where the leading edge contacted his neck and underside of the chin. This action along with the momentum of his body resulted in his forehead/head contacting the windshield. The windshield exhibited a spider web type crack pattern with a 25.4 cm (10.0") long hole through the glazing. Black hair from the boy's head was lodged in the lower and upper ends of the hole. The boy sustained vertically oriented area of superficial abrasions of the forehead at the hairline which were attributed to this contact.

The passenger side air bag module cover's contact sequence with the boy's neck entrapped his head against the windshield. As the passenger side air bag expanded, the interaction of the air bag on the boy's neck and chest leveraged his head from his torso resulting in a near decapitation type injury. The medical examiner indicated the neck was transected with only a small amount of tissue at the posterior aspect of the neck attaching the head to the torso with no observable injury to the spinal column.

The boy's head then moved upward and rearward striking the windshield header as noted by strands of hair embedded in the fabric overlaying the windshield. This contact was associated with the subscalpular contusion of the right occipito-parietal area. His torso then moved rearward and he came to rest between the front bucket seats with his head on floor behind the center console and his buttocks on the center console surface with his chest facing upward.

Vehicle #2

Driver #2 indicated he was wearing the three point manual lap and shoulder belt. He was not injured in the crash. He indicated that the force of the crash was extremely mild where the sensation was similar to being slapped on the shoulder. At first, he was unsure as to what had happen, as he did not see Vehicle #1 prior to the crash.

ATTACHMENT A
SELECTED PRINTS
CALSPAN CASE NO. 96-07
STATE OF

Selected Prints
Calspan Case No. 96-07
State of New York



1. View of the 1996 Ford Contour GL (Vehicle #1) travel path southbound 23 m (75') prior to the point of impact (POI).



2. View of Vehicle #1's travel path 15 m (50') prior to the (POI).



3. On-scene police photograph 15 m (50') prior to POI.



4. View of Vehicle #1's skid marks 7.6 m (25.0') prior to the POI.



5. Close-up view of the Vehicle #1's tire deflection mark at the POI.



6. Lookback view on Vehicle #1's travel path.



7. On-scene police photograph showing the location of Vehicle #1 on the southwest sidewalk.



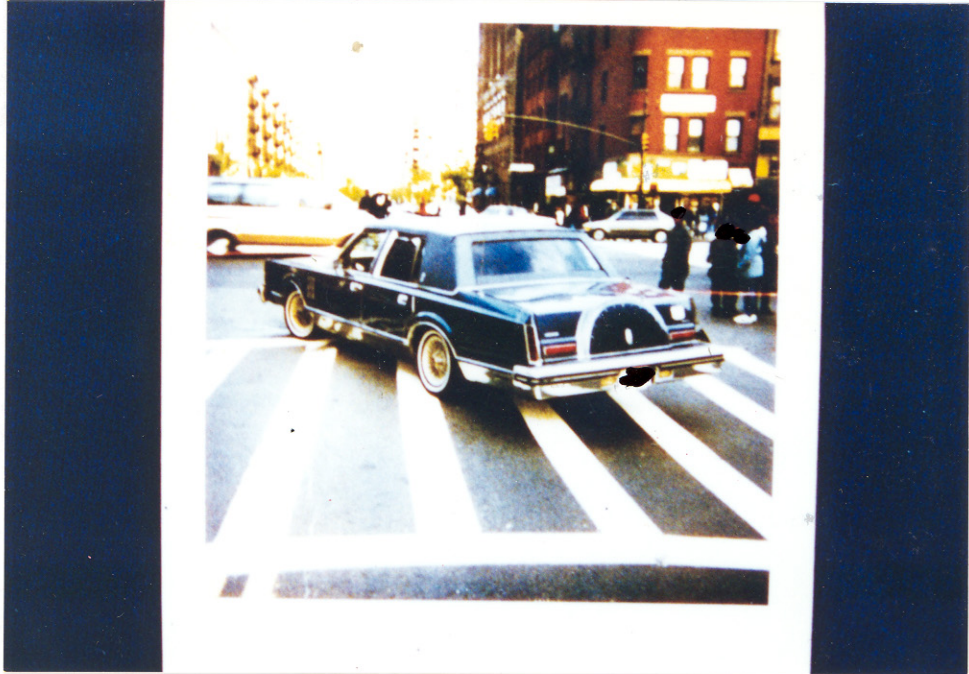
8. On-scene police photograph showing the location of Vehicle #1 on the sidewalk and the deployed passenger side air bag.



9. A lookback on-scene police photograph of Vehicle #1 on the sidewalk adjacent to the southwest corner of the intersection.



10. On-scene photograph view of the 1983 Lincoln Continental Mark VI (Vehicle #2) final rest position (FRP).



11. Another view of Vehicle #2's FRP.



12. Frontal view of the 1996 Ford Contour GL (Vehicle #1) showing the overall contact pattern.



13. View of the windshield showing the location of the right front occupant contact pattern.



14. Close-up view of the windshield contact pattern and slit in the glazing.

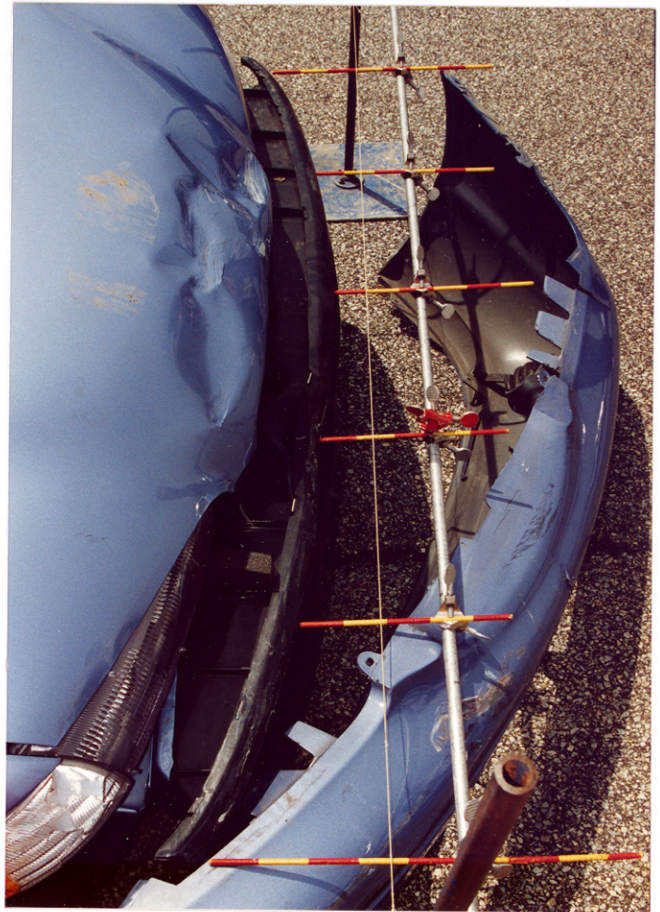


15. Lateral view of the windshield looking toward the left side of the vehicle and illustrating the outward deflection of the glazing.

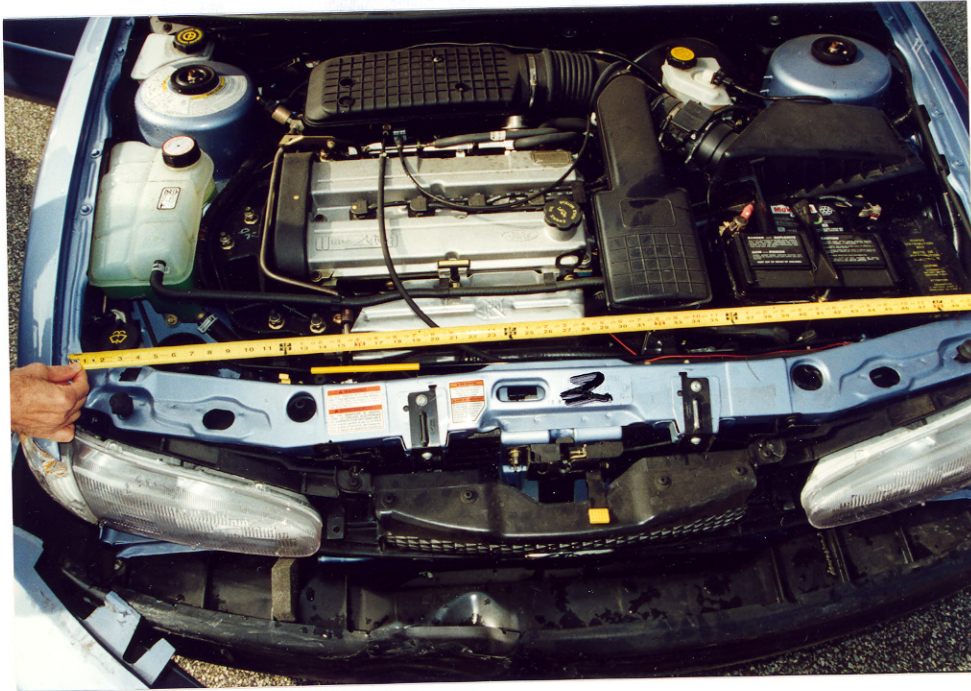


16. Frontal view of Vehicle #1 with the bumper fascia removed and calibrated measuring rods placed along the bumper reinforcement bar.

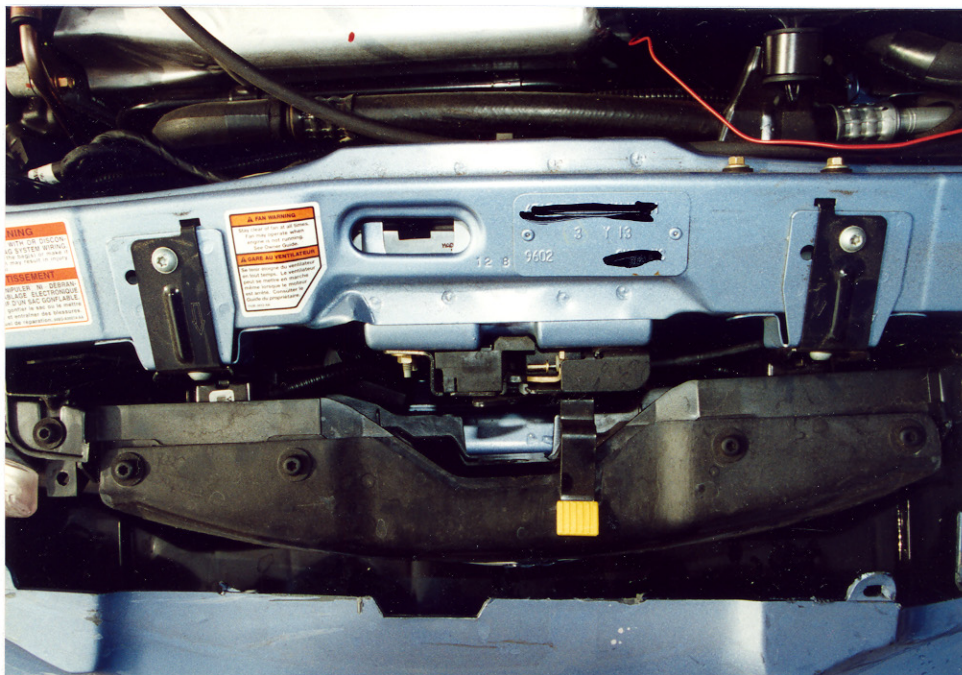
17. Lateral view of the frontal plane from right to left illustrating the extent of rearward bumper deformation.



18. Longitudinal view of the left side plane illustrating the extent of lateral shift.



19. View of the engine compartment and showing the location of the two air bag system crash sensors.



20. Close-up view of the air bag system crash sensors.



21. View of the right rear corner.



22. View of the right side plane.



23. Perpendicular view of the right front fender and bumper.



24. View of the right front corner.



25. Perpendicular view of the right front door surface which includes the driver's shoulder belt, the driver side air bag, the passenger side air bag, relative position of the front seats to the instrument panel, contact evidence on the roof, and upper A-pillar.



26. View of the driver side lap and shoulder belt latched into position showing no visible signs of at crash usage.



27. View of the driver side buckle illustrating the presence of bodily fluid transfers on the underside of the buckle.



28. Close-up view of the driver's side air bag module cover with the air bag placed back into the air bag module.



29. Close-up view of the contact evidence on the instrument eyebrow panel.



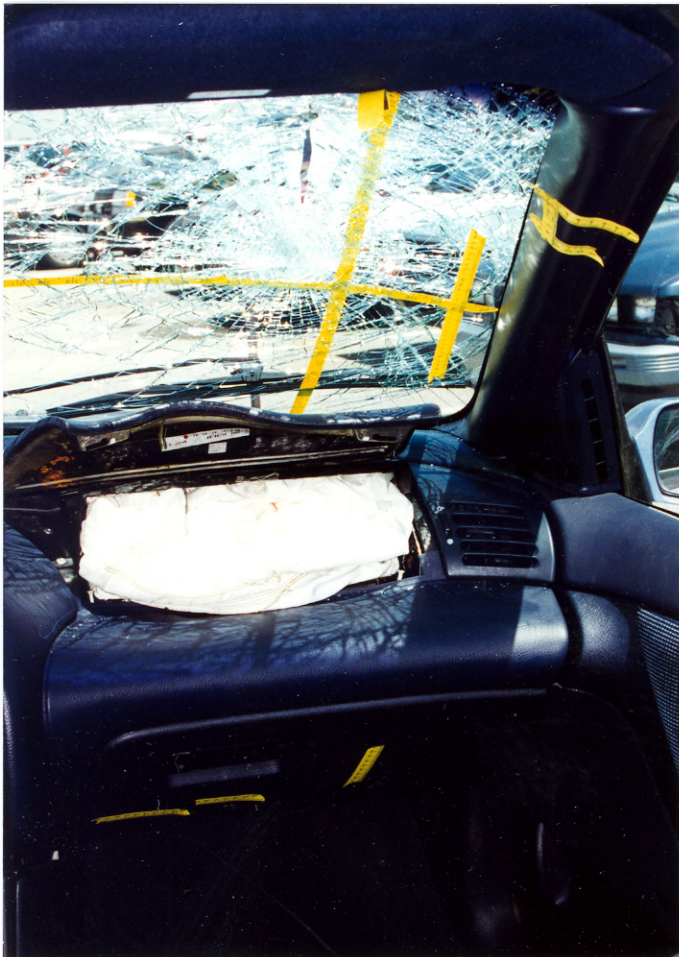
30. Lateral view of the steering wheel rim.

31. Overall vertical view of the left instrument panel.



32. View of the driver side air bag.

33. Overall vertical view of the center instrument panel.



34. Overall vertical view of the right instrument panel.



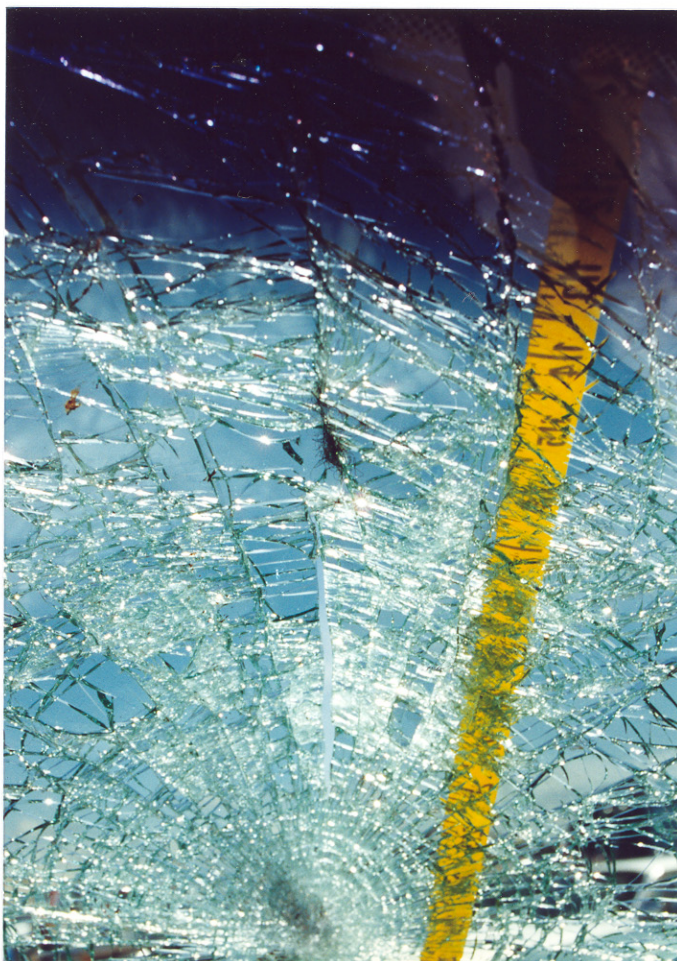
35. Contact evidence on the right sunvisor.



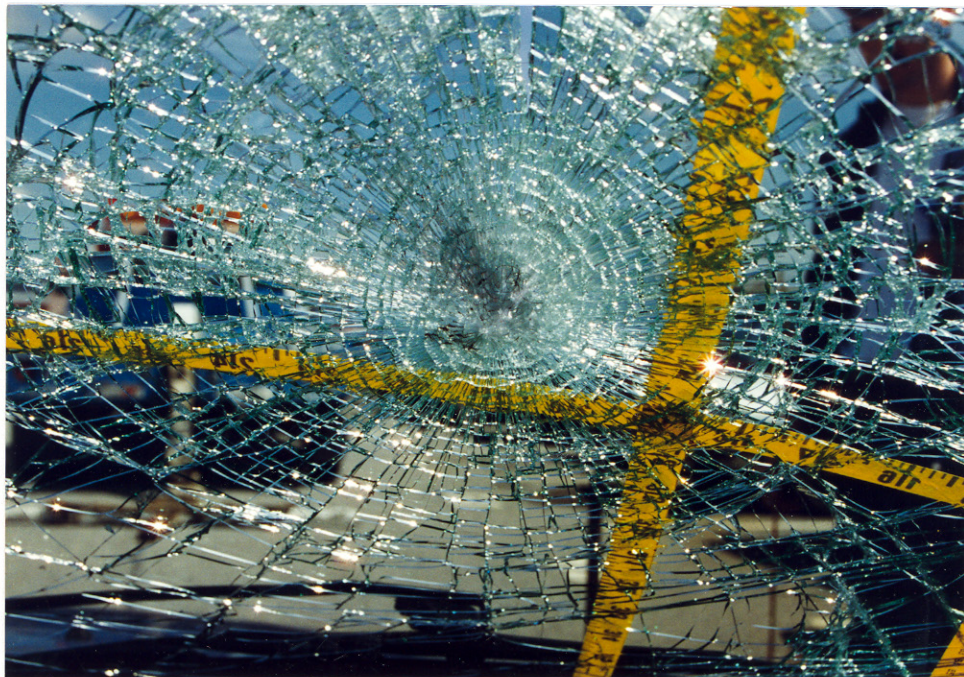
36. Hair fibers associated with contact by the right front occupant are visible at the leading edge of the windshield header.



37., 38, Air bag warning labels on the up side of the left and right sunvisors (respectively).



39., 40. Views of contact evidence on the windshield by the right front occupant's head.



41., 42 Close-up views of hair fibers in the windshield glazing resulting from contact by the right front occupant's head.



45. View of the passenger side air bag module cover.



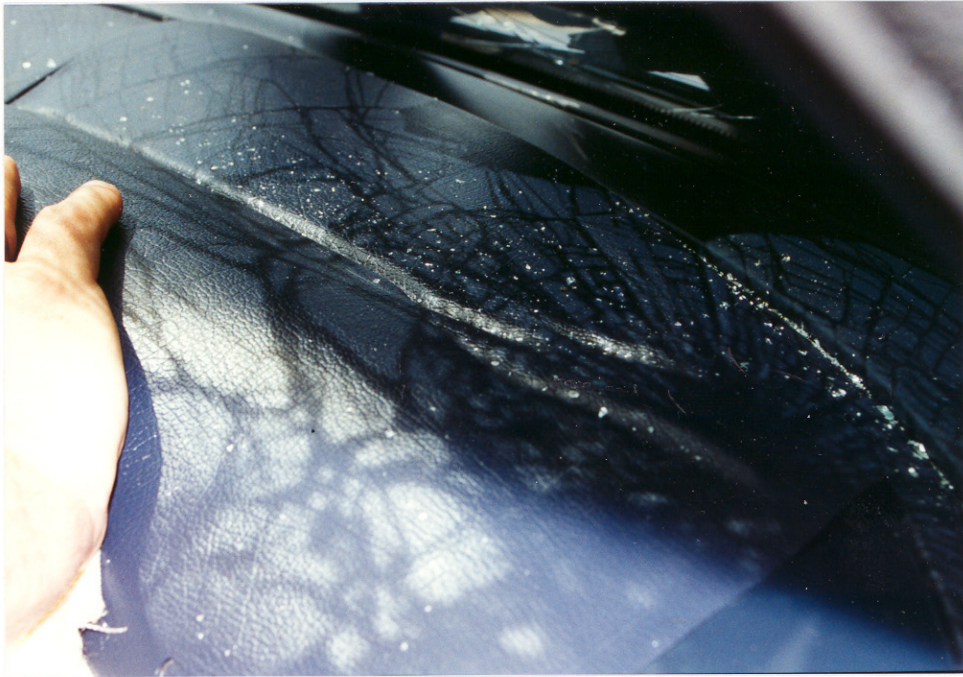
46. View of the right side air bag module cover along the left longitudinal seam at the junction of the cover hinge point.



43. View of contact evidence on the upper right A-pillar.



44. View of a whitish color transfer mark adjacent to the right upper A-pillar.



47. View of the right side air bag module cover along the right longitudinal seam at the junction of the cover hinge point.



48. View of the underside of the right front passenger air bag cover.

49. Overall view of the passenger side air bag.



50. Closer lateral view of the contact evidence on the surface of the passenger side air bag fabric.



51., 52. Close-up views of the contact evidence on the surface of the air bag. The contact evidence include bodily fluids, tissue transfer, and clothing fabric.



53. View showing bodily fluid transfers on the bottom and instrument panel side of the air bag.



54. Contact evidence on the glove compartment door.



55., 56. Angular views of the instrument panel showing the passenger side air bag module cover in two different positions.



57., 58. Additional views of the passenger side air bag. The second view was manually stretched to its maximum rearward extension.



59. Lateral view of the front seats highlighting the bodily fluid transfers on the seats and center console.



60. Closer view of the bodily fluid transfer on the seat back rests, center console, and right front seat belt buckle.



61., 62. Close-up views of the bodily fluid transfers.



63. View of the air bag warning label on the right front seat belt.



64. Lateral view of the rear seat area.



65. Frontal view of the 1983 Lincoln Continental Mark VI (Vehicle #2) showing impact damage.



66. Left front corner view.

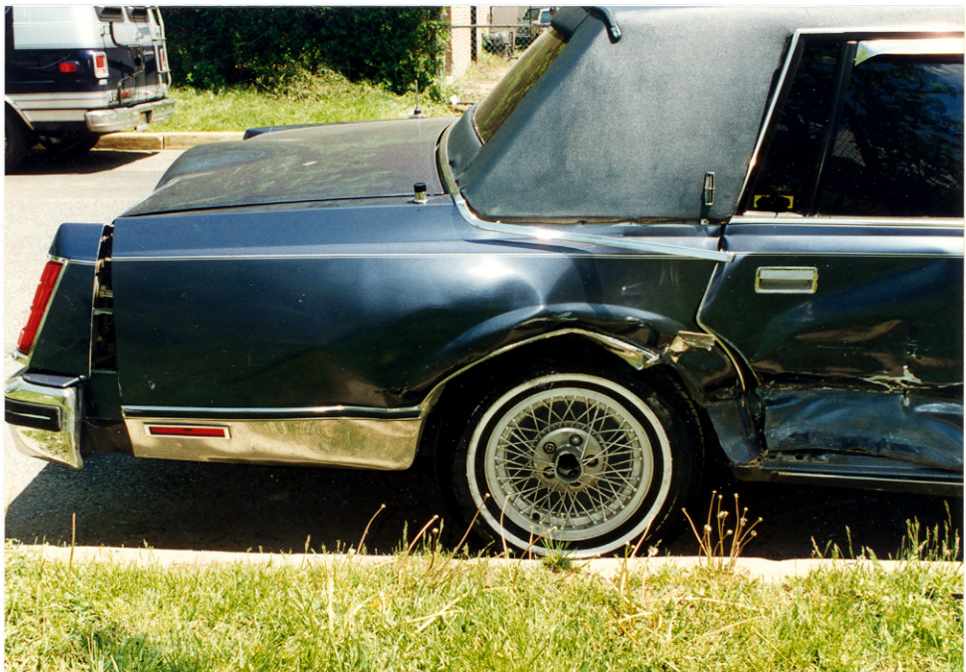


67. Left rear corner view.



68. View of the right rear corner.

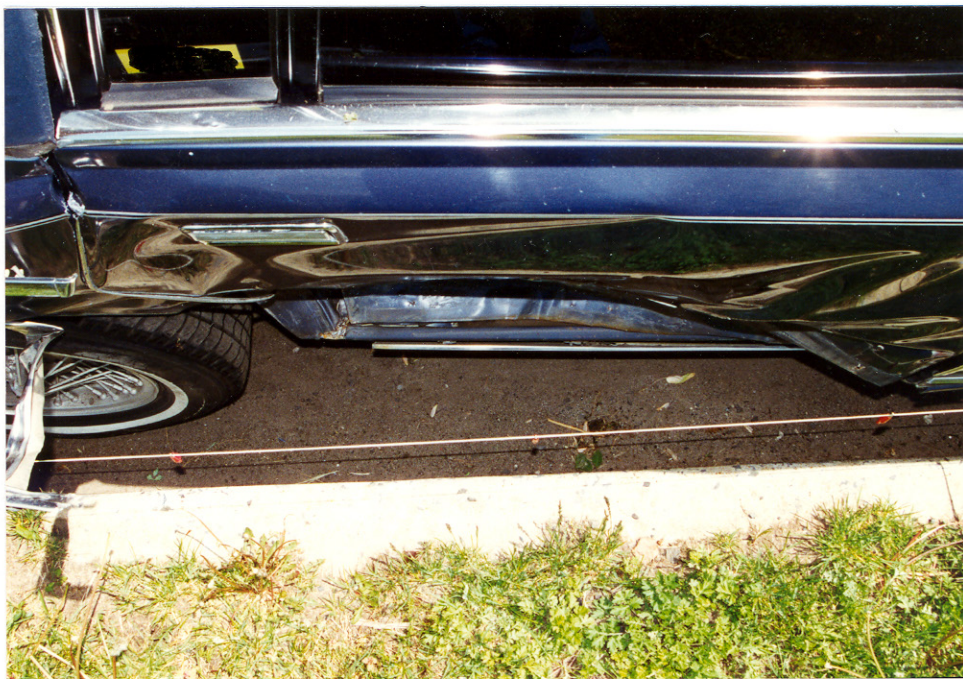
69. Longitudinal view of the right side plane illustrating the crush profile.



70. View of the direct contact damage on the right side pane.



71., 72. Closer views of the maximum crush area.



73., 74. Angular and overhead views of the direct contact damage.



75. View of the right front corner.



76. Perpendicular view of the right front door surface of Vehicle #2 including a lateral view of the left front seat back rest and instrument panel.



77. View of the rear seat area.



78. Perpendicular view of the left front door.

ATTACHMENT B

SMASH ALGORITHM

Summary of Results Using Damage

Calspan Case No. 96-07

	Speed Change (Damage)	Speed Change (Linear Momentum and Spinout)	Impact Speed (Linear Momentum and Spinout)
Vehicle #1			
Total	17 km/h (10 mph)	17 km/h (10 mph)	26 km/h (16 mph)
Longitudinal	-16 km/h (-10 mph)	-16 km/h (-10 mph)	26 km/h (16 mph)
Latitudinal	5 km/h (3 mph)	5 km/h (3 mph)	0 km/h (0 mph)
PDOF Angle	-19 ½	-19 ½	
Energy Dissipated	= 10914 Joules (8049 Ft-Lb)		
Barrier Equivalent Speed	= 12.4 km/h (7.7 mph)		
Calculated using crush coefficients entered by the user.			

Vehicle #2			
Total	12 km/h (7 mph)	12 km/h (7 mph)	34 km/h (21 mph)
Longitudinal	-7 km/h (-4 mph)	-7 km/h (-4 mph)	34 km/h (21 mph)
Latitudinal	-9 km/h (-6 mph)	-10 km/h (-6 mph)	0 km/h (0 mph)
PDOF Angle	55 ½	55 ½	
Energy Dissipated	= 26936 Joules (19865 Ft-Lb)		
Barrier Equivalent Speed	= 14.2 km/h (8.8 mph)		
Calculated using crush coefficients entered by the user.			

Separation Results

	Vehicle #1 áááááááááá	Vehicle #2 áááááááááá
Separation (Using Spinout)		
us	10 km/h (6 mph)	28 km/h (17 mph)
vs	5 km/h (3 mph)	-10 km/h (-6 mph)
psisd	38 deg/sec	88 deg/sec
Relative Velocity (Linear Momentum)		
Speed along line through cg	25 km/h (16 mph)	-0 km/h (-0 mph)
Speed orthogonal to cg line	-7 km/h (-5 mph)	-34 km/h (-21 mph)
Closing Velocity (Linear Momentum) = 25 km/h (16 mph)		

General Information

	Vehicle #1 áááááááááá	Vehicle #2 áááááááááá
Year	1995	1983
Make	Ford	Lincoln
Model	Contour	Mark VI
CDC	11FDEW1	02RZEW3
Side Damaged	F	R
PDOF Angle	-19 ½	55 ½
Heading Angle	359 ½	105 ½

Calculation method: Vehicle's Crush Coeff.

Vehicle's Crush Coeff.

d0 crush coeff. 99.19 sqrt(N)
d1 crush coeff. 6.47 sqrt(N)/cm

63.30 sqrt(N)
7.21 sqrt(N)/cm

Damage Information

	Vehicle #1 áááááááááá Yes	Vehicle #2 áááááááááá Yes
Vehicle Damage Known		
Crush Length	145.0 cm (57 in)	226.0 cm (89 in)
C1	1.0 cm (0 in)	0.0 cm (0 in)
C2	3.0 cm (1 in)	4.4 cm (2 in)
C3	3.0 cm (1 in)	5.1 cm (2 in)
C4	5.0 cm (2 in)	22.9 cm (9 in)
C5	5.0 cm (2 in)	22.6 cm (9 in)
C6	3.0 cm (1 in)	0.0 cm (0 in)
D	0.0 cm (0 in)	-141.9 cm (-56 in)
D'	9.9 cm (4 in)	-112.2 cm (-44 in)

Scene Information

Vehicle #1
ááááááááááVehicle #2
áááááááááá

Impact

x position	5.8 m (19.0 ft)	9.1 m (29.9 ft)
y position	6.7 m (22.0 ft)	7.6 m (24.9 ft)
heading angle	359 ½	105 ½

Rest

x position	6.8 m (22.3 ft)	9.8 m (32.2 ft)
y position	7.2 m (23.6 ft)	17.7 m (58.1 ft)
heading angle	15 ½	237 ½

Side-Slip Angle

0 ½

0 ½

Motion Information

Vehicle #1
ááááááááááVehicle #2
áááááááááá

Did Vehicle Rotate?

Yes

Yes

Did Rotation Stop?

No

No

End of Rotation x position

6.8 m (22.3 ft)

9.8 m (32.2 ft)

End of Rotation y position

7.2 m (23.6 ft)

17.7 m (58.1 ft)

End of Rotation angle

15.0 ½

237.0 ½

Curved Path?

No

No

Curved Path x position

0.0 m (0.0 ft)

0.0 m (0.0 ft)

Curved Path y position

0.0 m (0.0 ft)

0.0 m (0.0 ft)

Direction of Rotation

CW

CW

Amount of Rotation

< 360 ½

< 360 ½

Was There Sustained Contact Between the Vehicles? No

Friction Information

	Vehicle #1 áááááááááá	Vehicle #2 áááááááááá
Rolling Resistance		
Left Front Wheel	1.00	0.01
Right Front Wheel	1.00	0.01
Left Rear Wheel	0.80	0.33
Right Rear Wheel	0.80	0.33

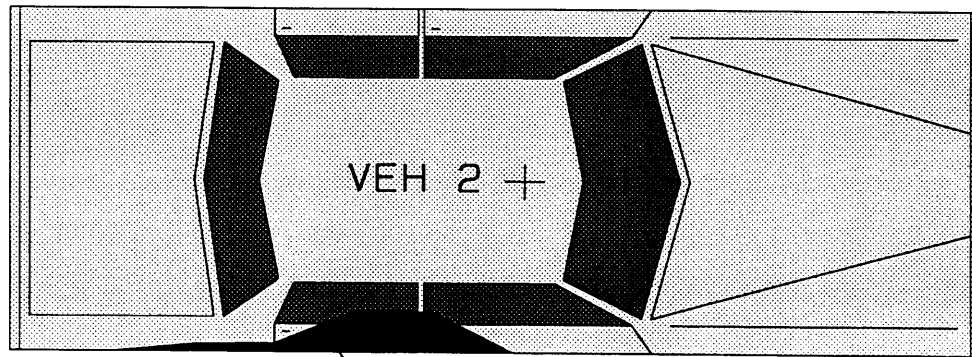
Coefficient of Friction = 0.60

Vehicle Dimensions

Vehicle #1
ááááááááááááVehicle #2
áááááááááááá

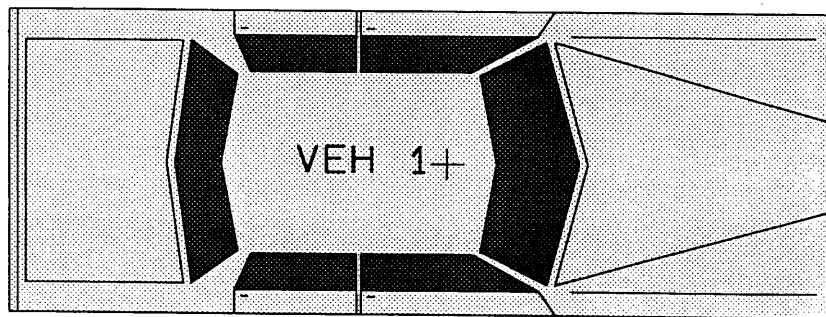
Length	467.2 cm (184 in)	556.3 cm (219 in)
Width	175.5 cm (69 in)	198.5 cm (78 in)
Wheelbase	270.4 cm (106 in)	298.0 cm (117 in)
Weight	1346 kgs (2967 lbs)	1964 kgs (4330 lbs)
CG to Front of Veh	228.1 cm (90 in)	251.0 cm (99 in)
Engine Displa		

1983 Lincoln Mark VI



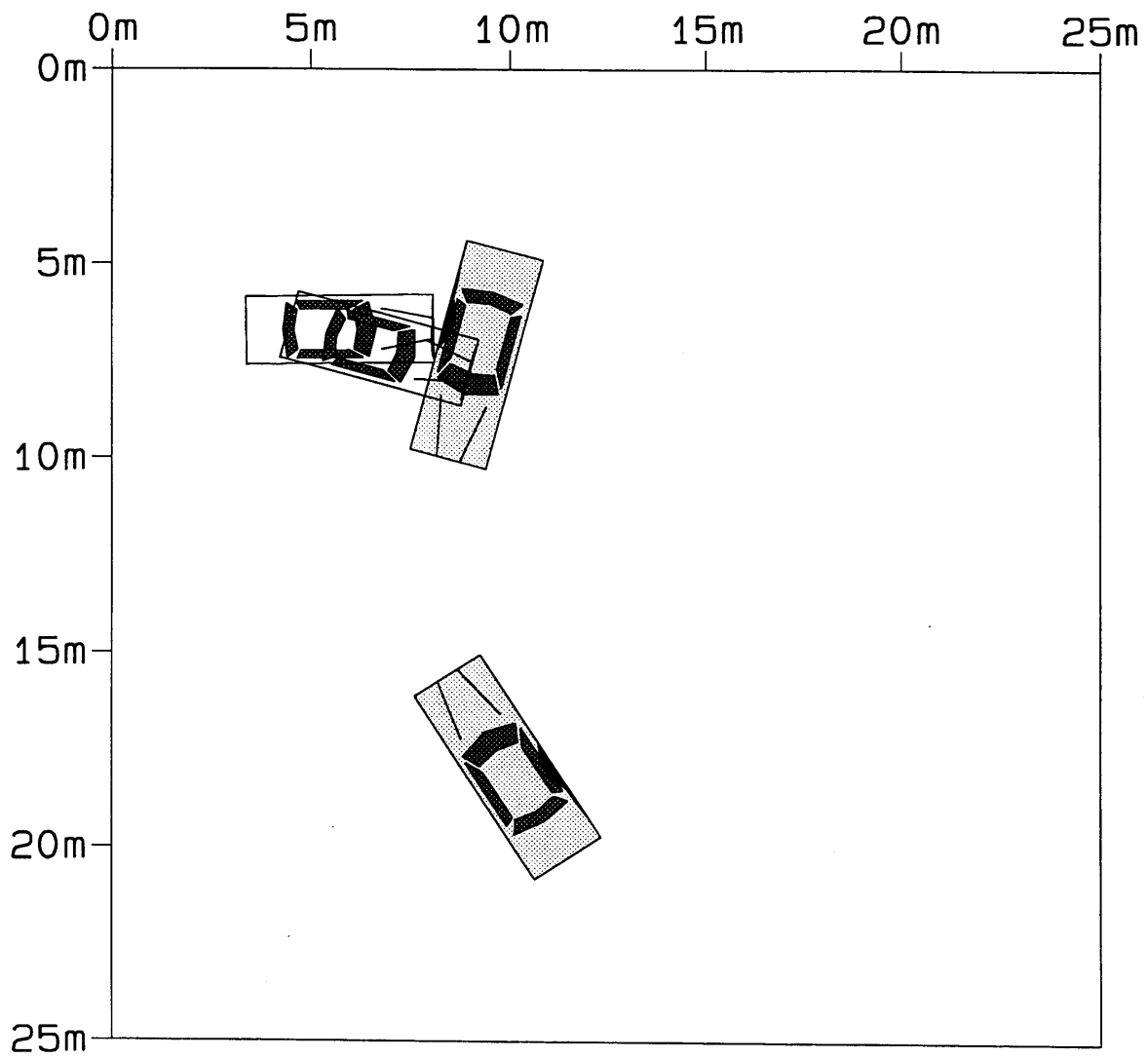
PDOF

1995 Ford Contour



PDOF

Calspan Case No. 96-07
1996



AIR BAG ACCIDENT LEVEL FORM

LOG NUMBER

059607

ACCIDENT DATE

MONTH

YEAR

05
96

INVESTIGATING TEAM:

Calspan - 05

FLEET VEHICLE

2

1 - 72 MERCURY, 73 CHEVROLET OR VOLVO

2 - PRIVATE OWNER

3 - INSURANCE FLEET

4 - GSA FLEET

5 - POLICE FLEET

6 - OTHER CORPORATE/PRIVATE FLEET

DID AIR BAG CAR REQUIRE TOWING?

Y

Y - YES

N - NO

DID AIR BAG DEPLOY?

Y

Y - YES

N - NO

I - INADVERTENT

VEHICLE

MODEL YEAR

MANUFACTURER _____ CODE

MODEL _____ CODE

96
12
035

CDC

RANKED BY SEVERITY

EVENT #

DEPLOY (Y/N)

1. 11 F D E W 1

1

Y

2. _____

3. _____

HIGHEST AIS IN AIR BAG VEHICLE

6

DELTA V OF PRINCIPLE DAMAGE TO AIR BAG VEHICLE

017 km/h

OBJECT STRUCK BY AIR BAG VEHICLE

Vehicle # 2

DRIVER AGE IN AIR BAG VEHICLE

035

NUMBER OF FRONT SEAT OCCUPANTS IN AIR BAG VEHICLE

02

NUMBER OF BELTED FRONT SEAT OCCUPANTS IN AIR BAG VEHICLE

00

TYPE OF INVESTIGATION

R - REMOTE

S - ON-SITE

S

AIR BAG OCCUPANT LEVEL FORM

BEST AVAILABLE

LOG NUMBER

059607

OCCUPANT NUMBER (assign by seating position)

01

OCCUPANTS AGE

035

SEATING POSITION

1 - LEFT

2 - CENTER 1 (first person in center =2)

3 - CENTER 2

4 - RIGHT

1

SEATING ROW

F - FRONT

B - BACK

F

OCCUPANT FATAL

Y - YES

N - NO

N

INJURY

ISS REG		OIC				INJURY SOURCE	DIRECT/ INDIRECT	DATA SOURCE
		BDY REG	ASP	LES	SYS/ ORG			
—	1.	—	—	—	—	<u>0</u>	—	—
—	2.	—	—	—	—	—	—	—
—	3.	—	—	—	—	—	—	—
—	4.	—	—	—	—	—	—	—
—	5.	—	—	—	—	—	—	—
—	6.	—	—	—	—	—	—	—
—	7.	—	—	—	—	—	—	—
—	8.	—	—	—	—	—	—	—
—	9.	—	—	—	—	—	—	—
—	10.	—	—	—	—	—	—	—
—	11.	—	—	—	—	—	—	—
—	12.	—	—	—	—	—	—	—

(If no injuries, enter 0 for the first AIS and leave the rest of the OIC's blank)

AIR BAG OCCUPANT LEVEL FORM

BEST AVAILABLE

LOG NUMBER 059607

OCCUPANT NUMBER (assign by seating position) 02

OCCUPANTS AGE 007

SEATING POSITION 4

1 - LEFT

2 - CENTER 1 (first person in center =2)

3 - CENTER 2

4 - RIGHT

SEATING ROW F

F - FRONT

B - BACK

OCCUPANT FATAL C

Y - YES

N - NO

INJURY

ISS REG	BDY REG	ASP	LES	SYS/ ORG	AIS	INJURY SOURCE	DIRECT/ INDIRECT	DATA SOURCE
— 1.	<u>N</u>	<u>W</u>	<u>M</u>	<u>W</u>	<u>6</u>	<u>185</u>	<u>1</u>	<u>01</u>
— 2.	<u>H</u>	<u>R</u>	<u>A</u>	<u>E</u>	<u>1</u>	<u>180</u>	<u>1</u>	<u>01</u>
— 3.	<u>H</u>	<u>C</u>	<u>A</u>	<u>E</u>	<u>1</u>	<u>180</u>	<u>1</u>	<u>01</u>
— 4.	<u>H</u>	<u>S</u>	<u>C</u>	<u>I</u>	<u>1</u>	<u>201</u>	<u>1</u>	<u>01</u>
— 5.	<u>F</u>	<u>S</u>	<u>A</u>	<u>I</u>	<u>1</u>	<u>001</u>	<u>1</u>	<u>01</u>
— 6.	<u>N</u>	<u>A</u>	<u>A</u>	<u>I</u>	<u>1</u>	<u>180</u>	<u>1</u>	<u>01</u>
— 7.	<u>F</u>	<u>R</u>	<u>A</u>	<u>I</u>	<u>1</u>	<u>180</u>	<u>1</u>	<u>01</u>
— 8.	<u>C</u>	<u>R</u>	<u>C</u>	<u>P</u>	<u>1</u>	<u>180</u>	<u>1</u>	<u>01</u>
— 9.	<u>C</u>	<u>C</u>	<u>C</u>	<u>P</u>	<u>1</u>	<u>180</u>	<u>1</u>	<u>01</u>
— 10.	—	—	—	—	—	—	—	—
— 11.	—	—	—	—	—	—	—	—
— 12.	—	—	—	—	—	—	—	—

(If no injuries, enter 0 for the first AIS and leave the rest of the OIC's blank)



GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum 96-07

3. Vehicle Number 01

VEHICLE IDENTIFICATION

4. Vehicle Model Year 96

Code the last two digits of the model year
(99) Unknown

5. Vehicle Make (specify): 12

Ford

Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(99) Unknown

6. Vehicle Model (specify): 035

Contour GL

Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(999) Unknown

7. Body Type 04

Note: Applicable codes may be found on
the back of this page.

8. Vehicle Identification Number

3 F A L P 6 5 3 5 T M (Serial # omitted)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

Left justify; Slash zeros and letter Z (0 and Z)

No VIN—Code all zeros

Unknown—Code all nines

9. Vehicle Special Use (This Trip) 0

(0) No special use

(1) Taxi

(2) Vehicle used as school bus

(3) Vehicle used as other bus

(4) Military

(5) Police

(6) Ambulance

(7) Fire truck or car

(8) Other (specify):

(9) Unknown

OFFICIAL RECORDS

10. Police Reported Vehicle Disposition 1

(0) Not towed due to vehicle damage

(1) Towed due to vehicle damage

(9) Unknown

11. Police Reported Travel Speed 999

Code to the nearest kmph (NOTE: 000 means
less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

 mph X 1.6093 = kmph

12. Speed Limit 056

(000) No statutory limit

Code posted or statutory speed limit in kmph

(999) Unknown

 mph X 1.6093 = kmph

13. Police Reported Alcohol Presence For Driver 9

(0) No alcohol present

(1) Yes alcohol present

(7) Not reported

(8) No driver present

(9) Unknown

14. Alcohol Test Result For Driver 96

Code actual value (decimal implied
before first digit—0.xx)

(95) Test refused

(96) None given

(97) AC test performed, results unknown

(98) No driver present

(99) Unknown

Source:

15. Police Reported Other Drug Presence For Driver 9

(0) No other drug(s) present

(1) Yes other drug(s) present

(7) Not reported

(8) No driver present

(9) Unknown

16. Other Drug Specimen Test Result For Driver 0

(0) No specimen test given

(1) Drug(s) not found in specimen

(2) Drug(s) found in specimen, (specify):

(3) Specimen test given, results unknown or not
obtained

(8) No driver present

(9) Unknown if specimen test given

17. Driver's Zip Code

(00001) Driver not a resident of U.S. or territories

 Code actual 5-digit zip code

(99998) No driver present

(99999) Unknown

18. Driver's Race/Ethnic Origin 9

(1) White (non-Hispanic)

(2) Black (non-Hispanic)

(3) White (Hispanic)

(4) Black (Hispanic)

(5) American Indian, Eskimo or Aleut

(6) Asian or Pacific Islander

(7) Other (specify):

(8) No driver present

(9) Unknown

CODES FOR BODY TYPE

CDS APPLICABLE VEHICLES

Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): _____

- (09) Unknown automobile type

Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

Utility Vehicles ($\leq 4,536$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

Van Based Light Trucks ($\leq 4,536$ kgs GVWR)

- (20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ($\leq 4,536$ kgs GVWR)
- (23) Van based motorhome ($\leq 4,536$ kgs GVWR)
- (24) Van based school bus ($\leq 4,536$ kgs GVWR)
- (25) Van based other bus ($\leq 4,536$ kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): _____

- (29) Unknown van type

Light Conventional Trucks (Pickup style cab, $\leq 4,536$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)
- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

Other Light Trucks ($\leq 4,536$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

OTHER VEHICLES

Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): _____
- (59) Unknown bus type

Medium/Heavy Trucks ($> 4,536$ kgs GVWR)

- (60) Step van ($> 4,536$ kgs GVWR)
- (61) Single unit straight truck ($4,536$ kgs $<$ GVWR $\leq 8,845$ kgs)
- (62) Single unit straight truck ($8,845$ kgs $<$ GVWR $\leq 11,793$ kgs)
- (63) Single unit straight truck ($> 11,793$ kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): _____
- (89) Unknown motored cycle type

Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

PRECRASH ENVIRONMENTAL DATA

<p>19. Relation To Interchange Or Junction <u>2</u></p> <p>(0) Non-interchange area and non-junction</p> <p>(1) Interchange area related</p> <p><i>Non-Interchange junctions</i></p> <p>(2) Intersection related</p> <p>(3) Driveway, alley access related</p> <p>(4) Other junction (specify) _____</p> <p>(5) <u>Unknown type of junction</u></p> <p>(9) Unknown</p>	<p>25. Roadway Surface Condition <u>1</u></p> <p>(1) Dry</p> <p>(2) Wet</p> <p>(3) Snow or slush</p> <p>(4) Ice</p> <p>(5) Sand, dirt, or oil</p> <p>(8) Other (specify): _____</p> <p>(9) Unknown</p>
<p>20. Trafficway Flow <u>2</u></p> <p>(0) Not physically divided (two way traffic)</p> <p>(1) Divided trafficway-median strip without positive barrier</p> <p>(2) Divided trafficway-median strip with positive barrier</p> <p>(3) One way traffic</p> <p>(9) Unknown</p>	<p>26. Light Conditions <u>1</u></p> <p>(1) Daylight</p> <p>(2) Dark</p> <p>(3) Dark, but lighted</p> <p>(4) Dawn</p> <p>(5) Dusk</p> <p>(9) Unknown</p>
<p>21. Number Of Travel Lanes <u>3</u></p> <p>(1) One</p> <p>(2) Two</p> <p>(3) Three</p> <p>(4) Four</p> <p>(5) Five</p> <p>(6) Six</p> <p>(7) Seven or more</p> <p>(9) Unknown</p>	<p>27. Atmospheric Conditions <u>0</u></p> <p>(0) No adverse atmospheric-related driving conditions</p> <p>(1) Rain</p> <p>(2) Sleet/hail</p> <p>(3) Snow</p> <p>(4) Fog</p> <p>(5) Rain and fog</p> <p>(6) Sleet and fog</p> <p>(7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): _____</p> <p>(9) Unknown</p>
<p>22. Roadway Alignment <u>1</u></p> <p>(1) Straight</p> <p>(2) Curve right</p> <p>(3) Curve left</p> <p>(9) Unknown</p>	<p>28. Traffic Control Device <u>1</u></p> <p>(0) No traffic control(s)</p> <p>(1) Traffic control signal (not RR crossing)</p> <p><i>Regulatory</i></p> <p>(2) Stop sign</p> <p>(3) Yield sign</p> <p>(4) School zone sign</p> <p>(5) Other regulatory sign (specify): _____</p> <p>(6) Warning sign (not RR crossing)</p> <p>(7) Unknown sign</p> <p>(8) Miscellaneous/other controls including RR controls (specify): _____</p> <p>(9) Unknown</p>
<p>23. Roadway Profile <u>1</u></p> <p>(1) Level</p> <p>(2) Uphill grade (> 2%)</p> <p>(3) Hill crest</p> <p>(4) Downhill grade (> 2%)</p> <p>(5) Sag</p> <p>(9) Unknown</p>	<p>29. Traffic Control Device Functioning <u>2</u></p> <p>(0) No traffic control device</p> <p>(1) Traffic control device not functioning (specify): _____</p> <p>(2) Traffic control device functioning properly</p> <p>(9) Unknown</p>
<p>24. Roadway Surface Type <u>2</u></p> <p>(1) Concrete</p> <p>(2) Bituminous (asphalt)</p> <p>(3) Brick or block</p> <p>(4) Slag, gravel, or stone</p> <p>(5) Dirt</p> <p>(8) Other (specify): _____</p> <p>(9) Unknown</p>	

PRECRASH DRIVER RELATED DATA

30. Driver's Distraction/Inattention To Driving (Prior To Recognition Of Critical Event) 9 9
- (00) No driver present
- (01) Attentive or not distracted
- (02) Looked but did not see
- Distractions*
- (03) By other occupant(s), (specify): _____
- (04) By moving object in vehicle (specify): _____
- (05) While talking or listening to cellular phone (specify location and type of phone): _____
- (06) While dialing cellular phone (specify location and type of phone): _____
- (07) While adjusting climate controls
- (08) While adjusting radio, cassette, CD (specify): _____
- (09) While using other device/controls integral to vehicle (specify): _____
- (10) While using or reaching for device/object brought into vehicle (specify): _____
- (11) Sleepy or fell asleep
- (12) Distracted by outside person, object, or event (specify): _____
- (13) Eating or drinking
- (14) Smoking related
- (97) Distracted/inattentive, details unknown
- (98) Other, distraction (specify): _____

(99) Unknown

31. Pre-Event Movement (Prior to Recognition of Critical Event) 2 1
- (00) No driver present
- (01) Going straight
- (02) Decelerating in traffic lane
- (03) Accelerating in traffic lane
- (04) Starting in traffic lane
- (05) Stopped in traffic lane
- (06) Passing or overtaking another vehicle
- (07) Disabled or parked in travel lane
- (08) Leaving a parking position
- (09) Entering a parking position
- (10) Turning right
- (11) Turning left
- (12) Making a U-turn
- (13) Backing up (other than for parking position)
- (14) Negotiating a curve
- (15) Changing lanes
- (16) Merging
- (17) Successful avoidance maneuver to a previous critical event
- (97) Other (specify): _____
- (99) Unknown

32. Critical Precrash Event 6 2

THIS VEHICLE LOSS OF CONTROL DUE TO:

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): _____
- (09) Unknown cause of control loss

THIS VEHICLE TRAVELLING

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (18) This vehicle decelerating
- (19) Unknown travel direction

OTHER MOTOR VEHICLE IN LANE

- (50) Other vehicle stopped
- (51) Traveling in same direction with lower steady speed
- (52) Traveling in same direction while decelerating
- (53) Traveling in same direction with higher speed
- (54) Traveling in opposite direction
- (55) In crossover
- (56) Backing
- (59) Unknown travel direction of other motor vehicle in lane

OTHER MOTOR VEHICLE ENCROACHING INTO LANE

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

PEDESTRIAN, PEDALCYCLIST, OR OTHER NONMOTORIST

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian—unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): _____
- (84) Pedalcyclist or other nonmotorist approaching roadway, (specify): _____
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

OBJECT OR ANIMAL

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify): _____
- (99) Unknown

33. Attempted Avoidance Maneuver 03

- (00) No driver present
- (01) No avoidance maneuver
- (02) Braking (no lockup)
- (03) Braking (lockup)
- (04) Braking (lockup unknown)
- (05) Releasing brakes
- (06) Steering left
- (07) Steering right
- (08) Braking and steering left
- (09) Braking and steering right
- (10) Accelerating
- (11) Accelerating and steering left
- (12) Accelerating and steering right
- (98) Other action (specify):

(99) Unknown

34. Pre-Impact Stability 2

- (0) No driver present
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify):

(9) Pre-crash stability unknown

35. Pre-Impact Location 1

- (0) No driver present
- (1) Stayed in original travel lane
- (2) Stayed on roadway but left original travel lane
- (3) Stayed on roadway, not known if left original travel lane
- (4) Departed roadway
- (5) Remained off roadway
- (6) Returned to roadway
- (7) Entered roadway
- (9) Unknown

36. Accident Type 69

(Note: Applicable codes on back of this page)

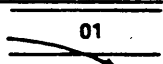
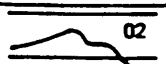
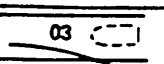
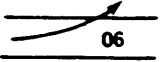

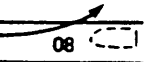
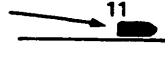


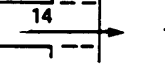

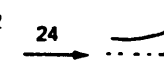
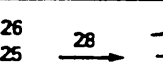


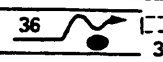
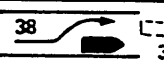
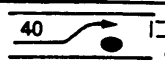
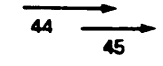
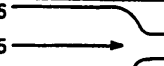
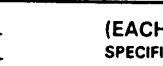


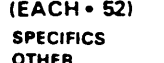
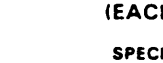




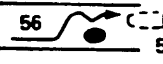


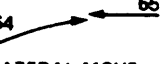
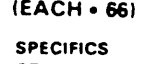
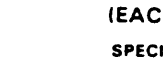



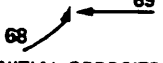
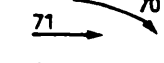
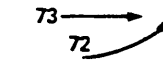

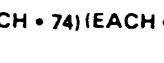

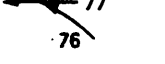
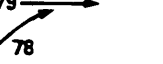
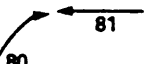
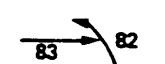
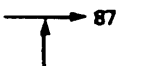
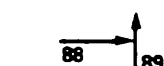


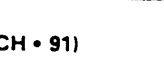

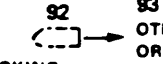





- (00) No impact

Code the number of the diagram that best describes the accident circumstance

- (98) Other accident type (specify):

(99) Unknown

STOP HERE IF GV07 DOES NOT EQUAL 01 - 49

Category	Configuration	ACCIDENT TYPES (Includes Intent)					
I. Single Driver	A. Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN	
	B. Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN	
	C. Forward Impact	 11 PARKED-VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER	16 SPECIFICS UNKNOWN
II. Same Trafficway Same Direction	D. Rear-End	 20 STOPPED 21, 22, 23	 22 SLOWER 25, 28, 27	 24 DECEL. 29, 30, 31	 26 AVOID COLLISION WITH VEH.	(EACH • 32) SPECIFICS OTHER	(EACH • 33) SPECIFICS UNKNOWN
	E. Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	(EACH • 42) SPECIFICS OTHER	(EACH • 43) SPECIFICS UNKNOWN
	F. Sideswipe Angle	 44 45	 46 45 47	 48 45 47	 50 45 47	(EACH • 48) SPECIFICS OTHER	(EACH • 49) SPECIFICS UNKNOWN
III. Same Trafficway Opposite Direction	G. Head-On	 50 LATERAL MOVE	 51 (EACH • 52) SPECIFICS OTHER	 53 (EACH • 53) SPECIFICS UNKNOWN	 55 (EACH • 54) SPECIFICS OTHER	 57 (EACH • 56) SPECIFICS UNKNOWN	 59 (EACH • 58) SPECIFICS UNKNOWN
	H. Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	(EACH • 62) SPECIFICS OTHER	(EACH • 63) SPECIFICS UNKNOWN
	I. Sideswipe Angle	 64 LATERAL MOVE	 65 (EACH • 66) SPECIFICS OTHER	 67 (EACH • 67) SPECIFICS UNKNOWN	 69 (EACH • 68) SPECIFICS OTHER	 71 (EACH • 70) SPECIFICS UNKNOWN	 73 (EACH • 72) SPECIFICS UNKNOWN
IV. Change Trafficway Vehicle Turning	J. Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 70 INITIAL SAME DIRECTIONS	 72 (EACH • 74) SPECIFICS OTHER	 74 (EACH • 75) SPECIFICS UNKNOWN	 76 (EACH • 77) SPECIFICS OTHER	 78 (EACH • 79) SPECIFICS UNKNOWN
	K. Turn Into Path	 77 TURN INTO SAME DIRECTION	 79 TURN INTO SAME DIRECTION	 81 TURN INTO OPPOSITE DIRECTIONS	 83 TURN INTO OPPOSITE DIRECTIONS	(EACH • 84) SPECIFICS OTHER	(EACH • 85) SPECIFICS UNKNOWN
V. Intersecting Paths (Vehicle Damage)	L. Straight Paths	 86 (EACH • 90) SPECIFICS OTHER	 88 (EACH • 91) SPECIFICS UNKNOWN	 90 (EACH • 90) SPECIFICS OTHER	 92 (EACH • 91) SPECIFICS UNKNOWN	 94 (EACH • 92) SPECIFICS OTHER	 96 (EACH • 93) SPECIFICS UNKNOWN
VI. Miscellaneous	M. Backing Etc.	 92 BACKING VEH.	 93 OTHER VEH. OR OBJECT	 98 Other Accident Type	 99 Unknown Accident Type	 100 No Impact	 101 No Impact

OCCUPANT RELATED

37. Driver Presence in Vehicle 1
 (0) Driver not present
 (1) Driver present
 (9) Unknown
38. Number of Occupants This Vehicle 0 2
 (00-96) Code actual number of occupants for this vehicle
 (97) 97 or more
 (99) Unknown
39. Number of Occupant Forms Submitted 0 2

AIR BAG RELATED

40. Is this an AOPS Vehicle? 1
 (0) No (includes unknown)
 (1) Yes - researcher determined
 (2) VIN determined air bag system
 (3) VIN determined automatic (passive) belts
 (4) VIN determined air bag and automatic (passive) belts
41. Air Bag(s) Deployment, First Seat Frontal 6
 (0) Not equipped or not available
 (1) No air bags deployed
Single Air Bag Vehicle
 (2) Driver air bag deployed
 (3) Driver air bag, unknown if deployed
Multiple Air Bag Vehicle
 (4) Driver side only deployed
 (5) Passenger side only deployed
 (6) Driver and passenger side deployed
 (7) Driver and passenger side unknown if deployed
 (8) Air bag(s) deployed, details unknown
 (9) Unknown
42. Air Bag(s) Deployment, Other Than First Seat Frontal 0
 (0) Not equipped with an "other" air bag
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown

Specify type of "other" air bag present: _____

VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight 1 2 6 0
 Code weight to nearest 10 kilograms.
 (045) Less than 454 kilograms
 (612) 6,124 kilograms or more
 (999) Unknown
2 769 lbs X .4536 = _____ kgs

Source: _____

44. Vehicle Cargo Weight 0 0 0 0
 Code weight to nearest 10 kilograms.
 (000) Less than 5 kilograms
 (454) 4,536 kilograms or more
 (999) Unknown
 _____ lbs X .4536 = _____ kgs

Source: _____

ROLLOVER DATA

45. Rollover 0 0
 (00) No rollover (no overturning)
Rollover (primarily about the longitudinal axis)
 (01-16) Code the number of quarter turns
 (17) Rollover, 17 or more quarter turns (specify): _____
 (98) Rollover--end-over-end (i.e., primarily about the lateral axis)
 (99) Rollover (overturn), details unknown
46. Rollover Initiation Type 0 0
 (00) No rollover
 (01) Trip-over
 (02) Flip-over
 (03) Turn-over
 (04) Climb-over
 (05) Fall-over
 (06) Bounce-over
 (07) Collision with another vehicle
 (08) Other rollover initiation type specify): _____
 (98) Rollover--end-over-end
 (99) Unknown rollover initiation type
47. Location of Rollover Initiation 0
 (0) No rollover
 (1) On roadway
 (2) On shoulder--paved
 (3) On shoulder--unpaved
 (4) On roadside or divided trafficway median
 (8) Rollover--end-over-end
 (9) Unknown
48. Rollover Initiation Object Contacted 0 0
 (Note: Applicable codes on back of page)
49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0
 (0) No rollover
 (1) Wheels/tires
 (2) Side plane
 (3) End plane
 (4) Undercarriage
 (5) Other location on vehicle (specify): _____
 (6) Non-contact rollover forces (specify): _____
 (8) Rollover--end-over-end
 (9) Unknown
50. Direction of Initial Roll 0
 (0) No rollover
 (1) Roll right - primarily about the longitudinal axis
 (2) Roll left - primarily about the longitudinal axis
 (8) Rollover--end-over-end
 (9) Unknown roll direction

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover
- (01-30) — Vehicle Number

Noncollision

- (31) Turn-over — fall-over
- (32) No rollover impact initiation (end-over-end)
- (34) Jackknife

Collision With Fixed Object

- (41) Tree (\leq 10 cm in diameter)
- (42) Tree ($>$ 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

- (50) Pole or post (\leq 10 cm in diameter)
- (51) Pole or post ($>$ 10 cm but \leq 30 cm in diameter)
- (52) Pole or post ($>$ 30 cm in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)
(specify): _____

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): _____

- (69) Unknown fixed object _____

Collision with Nonfixed Object

- (70) Passenger car, light truck, van, or other vehicle not in-transport
- (71) Medium/heavy truck or bus not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): _____

- (89) Unknown nonfixed object _____

- (98) Other event (specify): _____

- (99) Unknown event or object _____

OVERRIDE/UNDERRIDE (THIS VEHICLE)

51. Front Override/Underride (this Vehicle) 0
52. Rear Override/Underride (this Vehicle) 0
- (0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride
- Override (see specific CDC)*
[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]
- (1) 1st CDC
 (2) 2nd CDC
 (3) Other not automated CDC (specify):

- Underride (see specific CDC)*
[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]
- (4) 1st CDC
 (5) 2nd CDC
 (6) Other not automated CDC (specify):

- (7) Medium/heavy truck or bus override (of any configuration)
 (9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value
 (996) Non-horizontal impact
 (997) Noncollision
 (998) Impact with object
 (999) Unknown

53. Heading Angle For This Vehicle 3 5 9
54. Heading Angle For Other Vehicle 1 0 5

RECONSTRUCTION DATA

55. Towed Trailing Unit 0
- (0) No towed unit
 (1) Yes—towed trailing unit
 (9) Unknown
56. Documentation of Trajectory Data for This Vehicle 1
- (0) No
 (1) Yes
57. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
- (0) Not collision (for highest delta V) with tree or pole
 (1) Not damaged
 (2) Cracked/sheared
 (3) Tilted < 45 degrees
 (4) Tilted ≥ 45 degrees
 (5) Uprooted tree
 (6) Separated pole from base
 (7) Pole replaced
 (8) Other (specify):

- (9) Unknown

ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V

58. Basis for Total (Resultant) Delta V (highest) 0 2

(00) No vehicle inspection

Delta V Calculated

- (01) Reconstruction program-damage only routine
 (02) Reconstruction program-damage and trajectory routine
 (03) Missing vehicle algorithm

Delta V Not Calculated

- (04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

All vehicles within scope (CDC applicable) of reconstruction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.

- (05) Rollover
 (06) Other non-horizontal forces
 (07) Sideswipe type damage
 (08) Severe override
 (09) Yielding object
 (10) Overlapping damage
 (11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available, (specify):

- (98) Other, (specify): _____

COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V

Highest

0 1 717
(10 mph) Nearest kmph (highest)

Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)
 (160) 159.5 kmph and above
 (999) Unknown

60. Longitudinal Component of Delta V

Highest

⊕
- 0 1 7

Nearest kmph (highest)

Nearest kmph (secondary)

(NOTE: __000 means greater than
 -0.5 kmph and less than +0.5 kmph)
 (±160) ±159.5 kmph and above
 (__999) Unknown

61. Lateral Component of Delta V

Highest

⊕
- 0 0 5

Nearest kmph (highest)

Nearest kmph (secondary)

(NOTE: __000 means greater than -0.5 kmph and
 less than +0.5 kmph)
 (±160) ±159.5 kmph and above
 (__999) Unknown

62. Energy Absorption

Highest

0 1 0 9 0 010,914 Nearest 100 joules (highest)

Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)
 (9997) 999,650 joules or more
 (9999) Unknown

63. Impact Speed

Highest

0 2 6026
(16 mph) Nearest kmph (highest)

Nearest kmph (secondary)

(NOTE: 000 means
 less than 0.5 kmph)
 (160) 159.5 kmph and above
 (998) Trajectory algorithm not run
 (999) Unknown

DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program Results (For Highest Delta V)

(0) No reconstruction

(1) Collision fits model — results appear reasonable

(2) Collision fits model — results appear high

(3) Collision fits model — results appear low

(4) Borderline reconstruction — results appear reasonable

OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed

Highest

0 1 212.4 Nearest kmph (highest)

Nearest kmph (secondary)

(NOTE: 000 means
 less than 0.5 kmph)
 (160) 159.5 kmph and above
 (999) Unknown

ESTIMATED DELTA V

66. Estimated Highest Delta V (Researcher Determined)

(0) Reconstruction Delta V coded

Estimated Delta V

- (1) Less than 10 kmph
- (2) ≥ 10 kmph but < 25 kmph
- (3) ≥ 25 kmph but < 40 kmph
- (4) ≥ 40 kmph but < 55 kmph
- (5) ≥ 55 kmph

Other estimates of damage severity

- (6) Minor
- (7) Moderate
- (8) Severe
- (9) Unknown

0

INSPECTION TYPE

67. Type of Vehicle Inspection

- (0) No inspection
- (1) Vehicle fully repaired-no damage evident
- (2) Partial inspection (specify):

(3) Complete inspection

3

DELTA V EVENT NUMBER

68. Delta V Event Number

Code the accident event sequence number that resulted in the Delta V that has been coded above for this vehicle

(99) Unknown

1

*** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67 = 0), ***

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

*** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE ***

THE EXTERIOR VEHICLE, INTERIOR VEHICLE,
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.

EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM**

CRASHWORTHINESS DATA SYSTEM	
1. Primary Sampling Unit Number	3. Vehicle Number
2. Case Number - Stratum	

VEHICLE IDENTIFICATION

VIN 3 F A L P G 5 3 5 T M (Serial # on title) Model Year 9 6
Vehicle Make (specify): FORD Vehicle Model (specify): Contour GL

LOCATOR

Locate the end of the damage with respect to the vehicle's damaged center point or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
1	Bumper Corner →	Bumper Corner →	Cut
	Bumper Corner	Bumper Corner	

CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

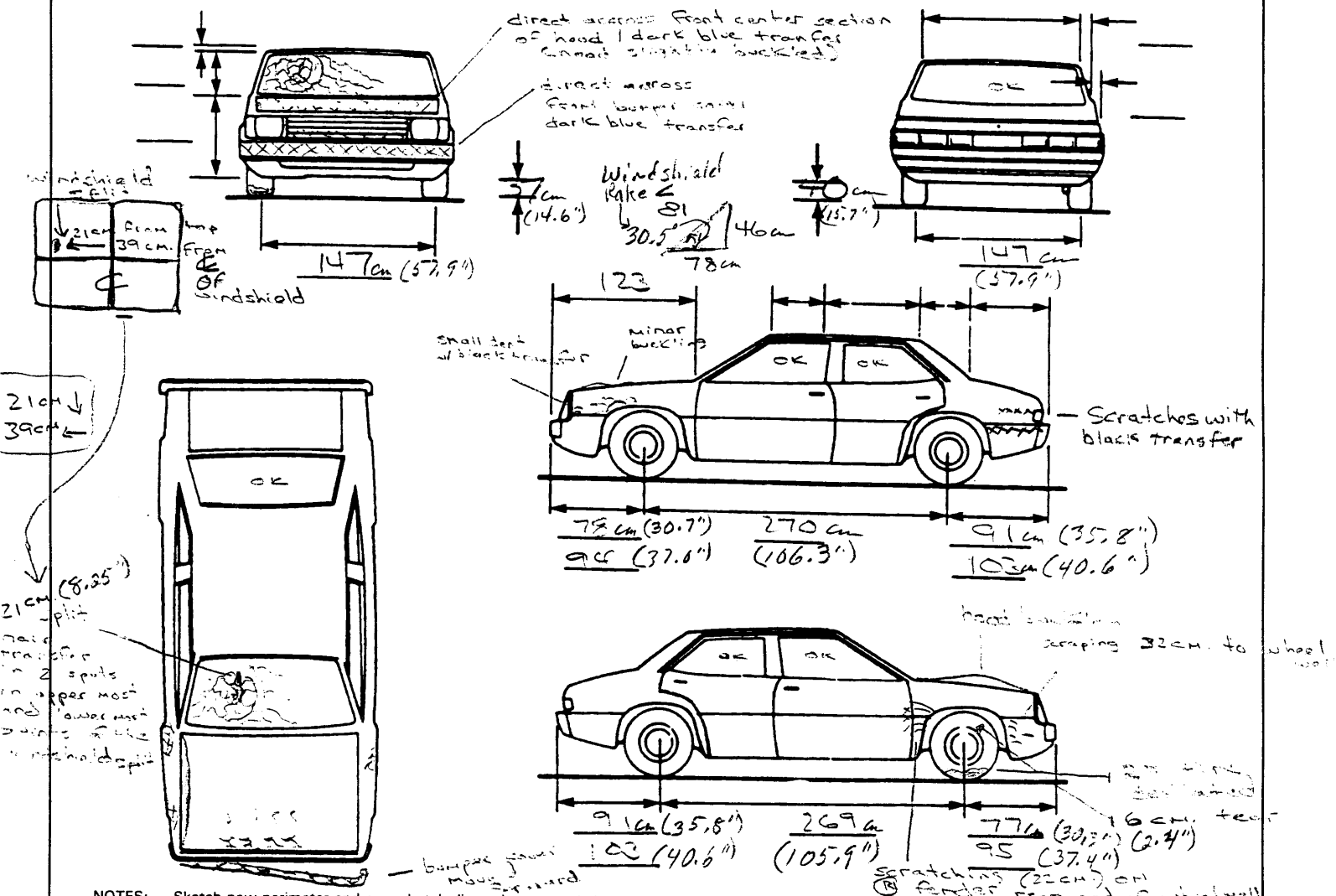
Use as many lines/columns as necessary to describe each damage profile.

[illegible]

VEHICLE DAMAGE SKETCH

TIRE—WHEEL DAMAGE a. Rotation physically restricted RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>2</u> (1) Yes (2) No (8) NA (9) Unk.		b. Tire deflated RF <u>1</u> LF <u>2</u> RR <u>2</u> LR <u>2</u>		ORIGINAL SPECIFICATIONS Wheelbase <u>(106.5") 270.5</u> cm Overall Length <u>(183.9") 467.1</u> cm Maximum Width <u>(69.1") 175.5</u> cm Curb Weight <u>(2,769 lb) 1256.0</u> kg Average Track <u>(58.8") 149.4</u> cm Front Overhang <u>(36.8") 93.5</u> cm Rear Overhang <u>(40.6") 103.1</u> cm Undeformed End Width <u>(52.1") 145.0</u> cm Engine Size: cyl./displ. <u>2.0</u> L		WHEEL STEER ANGLES (For locked front wheels or displaced rear axles only) RF \pm _____ ° LF \pm _____ ° RR \pm _____ ° LR \pm _____ ° Within \pm 5 degrees	
TYPE OF TRANSMISSION <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic END SHIFT \geq 10 CM <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				DRIVE WHEELS <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD Approximate Cargo Weight <u>ϕ</u> kg			

MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CDC WORKSHEET

CODES FOR OBJECT CONTACTED

(01-30) — Vehicle Number

Noncollision

- (31) Overturn — rollover (excludes end-over-end)
(32) Rollover—end-over-end
(33) Fire or explosion
(34) Jackknife
(35) Other intraunit damage (specify):

(36) Noncollision injury

(38) Other noncollision (specify):

(39) Noncollision — details unknown

Collision With Fixed Object

- (41) Tree (≤ 10 cm in diameter)
(42) Tree (> 10 cm in diameter)
(43) Shrubbery or bush
(44) Embankment

(45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

- (50) Pole or post (≤ 10 cm in diameter)
 (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
 (52) Pole or post (> 30 cm in diameter)
 (53) Pole or post (diameter unknown)

(54) Concrete traffic barrier

(55) Impact attenuator

(56) Other traffic barrier (includes guardrail)
(specify):

(57) Fence

(58) Wall

(59) Building

(60) Ditch or culvert

(61) Ground

(62) Fire hydrant

(63) Curb

(64) Bridge

(68) Other fixed object (specify):

(69) Unknown fixed object

Collision with Nonfixed Object

- (70) Passenger car, light truck, van, or other vehicle not in-transport
(71) Medium/heavy truck or bus not in-transport
(72) Pedestrian
(73) Cyclist or cycle
(74) Other nonmotorist or conveyance

(75) Vehicle occupant

(76) Animal

(77) Train

(78) Trailer, disconnected in transport

(79) Object fell from vehicle in-transport

(88) Other nonfixed object (specify):

(89) Unknown nonfixed object

(98) Other event (specify):

(99) Unknown event or object

DEFORMATION CLASSIFICATION BY EVENT NUMBER

[illegible]

COLLISION DEFORMATION CLASSIFICATION

HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>02</u>	6. <u>11</u>	7. <u>F</u>	8. <u>D</u>	9. <u>E</u>	10. <u>W</u>	11. <u>01</u>

Second Highest Delta "V"

12. <u> </u>	13. <u> </u>	14. <u> </u>	15. <u> </u>	16. <u> </u>	17. <u> </u>	18. <u> </u>	19. <u> </u>
-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------

CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

HIGHEST DELTA "V"

20. L	21. C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	22. ± D
<u>145</u> (57.1")	<u>001</u> (0.4")	<u>003</u> (1.2")	<u>003</u> (1.2")	<u>005</u> (2.0")	<u>005</u> (2.0")	<u>002</u> (1.2")	<u>+</u> <u> </u>

Second Highest Delta "V"

23. L	24. C ₁	C ₂	C ₃	C ₄	C ₅	C ₆	25. ± D
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u>+</u> <u> </u>

26. Undeformed End Width

(Coded when highest severity impact is an end plane impact.)

Code to the nearest centimeter

(250) 250 centimeters or more

(998) No highest severity end plane impact

(999) Unknown

145

27. Direct Damage Width

(For highest severity impact)

Code to the nearest centimeter

(250) 250 centimeters or more

(999) Unknown

144

28. Original Wheelbase

Code to the nearest centimeter

(650) 650 centimeters or more

(999) Unknown

106.5 inches X 2.54 = 271 centimeters

271

29. Original Average Track Width

Code to the nearest centimeter

(185) 185 centimeters or more

(999) Unknown

58.3 inches X 2.54 = 149 centimeters

149

30. Are CDCs Documented
but Not Coded on The
Automated File?

- (0) No
(1) Yes

0

31. Researcher's Assessment of Vehicle
Disposition

- (0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

1

32. Is This A Multi-Stage Manufactured Vehicle
And/Or A Certified Altered Vehicle?

- (0) No post manufacturer modifications
(1) Yes - post manufacturer modifications
(specify): _____

0

(Include photograph of CERTIFICATION
PLACARD in case report)

- (9) Unknown if vehicle is modified

FIRE OCCURRENCE

33. Fire Occurrence

- (0) No fire

Yes, fire occurred

- (1) Minor
(2) Major
(9) Unknown

0

34. Origin of Fire

- (0) No fire
(1) Vehicle exterior (front, side, back, top)
(2) Exhaust system
(3) Fuel tank (and other fuel retention
system parts)
(4) Engine compartment
(5) Cargo/trunk compartment
(6) Instrument panel
(7) Passenger compartment area
(8) Other location (specify): _____

0

- (9) Unknown

FUEL SYSTEM

35. Location of Fuel Tank-1 Filler Cap

3

36. Location of Fuel Tank-2 Filler Cap

0

- (0) No fuel tank
(1) On back plane
(2) Aft of center of the rear wheels (rear axle)
on left side plane
(3) Aft of center of the rear wheels (rear axle)
on right side plane
(4) Forward of center of the rear wheels (rear
axle) on left side plane
(5) Forward of center of the rear wheels (rear
axle) on right side plane
(6) Over the center of the rear wheels (rear
axle) on left side plane
(7) Over the center of the rear wheels (rear
axle) on right side plane
(8) Other (specify): _____
(9) Unknown

37. Type of Fuel Tank-1

1

38. Type of Fuel Tank-2

0

- (0) No fuel tank (electrical vehicle)
(1) Metallic
(2) Non-metallic
(9) Unknown

39. Location of Fuel Tank-1

4

40. Location of Fuel Tank-2

0

- (0) No fuel tank
(1) Aft of center of the rear wheels (rear axle)
centered
(2) Aft of center of the rear wheels (rear axle)
left side
(3) Aft of center of the rear wheels (rear axle)
right side
(4) Forward of center of the rear wheels (rear
axle) centered
(5) Forward of center of the rear wheels (rear
axle) left side
(6) Forward of center of the rear wheels (rear
axle) right side
(7) Over center of the rear wheels (rear axle)
(8) Other (specify): _____
(9) Unknown

41. Damage to Fuel Tank-1

1

42. Damage to Fuel Tank-2

0

- (0) No fuel tank
(1) No damage to fuel tank
(2) Deformed, no seam failure
(3) Deformed, with a seam failure
(4) Punctured
(5) Lacerated (ripped)
(6) Abraded (scraped)
(7) Filler neck separation from the fuel tank
(8) Other damage (specify): _____
(9) Unknown

43. Leakage Location of Fuel System-1

1

44. Leakage Location of Fuel System-2

0

(0) No fuel tank

(1) No fuel leakage

Primary Area Of Leakage

(2) Tank

(3) Filler neck

(4) Cap

(5) Lines/pump/filter

(6) Vent/emission recovery

(8) Other (specify): _____

(9) Unknown

45. Fuel Type-1

0 1

46. Fuel Type-2

0 0*Single Fuel Type*

(00) No fuel tank

(01) Gasoline

(02) Diesel

(03) CNG (Compressed Natural Gas)

(04) LPG (Liquid Petroleum Gas) also known as Propane

(05) LNG (Liquid Natural Gas)

(06) Methanol (M100 or M85)

(07) Ethanol (E100 or E85)

(08) Other (Hydrogen or others) (specify): _____

Electric Powered or Electric/Solar Powered Vehicles

(10) Lead Acid Battery

(11) Nickel-Iron Battery

(12) Nickel-Cadmium Battery

(13) Sodium Metal Chloride Battery

(14) Sodium Sulfur Battery

(18) Other (Specify): _____

(98) Other Hybrid (specify): _____

(99) Unknown fuel type

47. Is This Vehicle Equipped With More Than Two Fuel Tanks?

0

(0) No (one or two tanks only)

Yes - More Than Two Tanks(1) Yes -- no damage to any tank or filler cap and no fuel system leakage(2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location): _____(3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):

Type of tank _____

Tank location _____

Filler cap location _____

Tank damage _____

Location of leakage _____

Type of fuel _____

(9) Unknown if more than two tanks

COMMENTS

*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED ***

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum 96-07

3. Vehicle Number 01

INTEGRITY

4. Passenger Compartment Integrity 01

(00) No integrity loss

Yes, Integrity Was Lost Through

(01) Windshield

(02) Door (side)

(03) Door/hatch (back door)

(04) Roof

(05) Roof glass

(06) Side window

(07) Rear window (backlight)

(08) Roof and roof glass

(09) Windshield and door (side)

(10) Windshield and roof

(11) Side and rear window (side window and backlight)

(12) Windshield and side window

(13) Door and side window

(98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 1 7. LR 1 8. RR 1 9. TG/H 0

(0) No door/gate/hatch

(1) Door/gate/hatch remained closed and operational

(2) Door/gate/hatch came open during collision

(3) Door/gate/hatch jammed shut

(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code Ø

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

(1) Door operational (no damage)

(2) Latch/striker failure due to damage

(3) Hinge failure due to damage

(4) Door structure failure due to damage

(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage

(6) Latch/striker and hinge failure due to damage

(8) Other failure (specify):

(9) Unknown

GLAZING

Type of Window/Windshield Glazing

15. WS 1 16. LF 2 17. RF 2 18. LR 2 19. RR 2

20. BL 2 21. Roof 0 22. Other 0

(0) No glazing

(1) AS-1 — Laminated

(2) AS-2 — Tempered

(3) AS-3 — Tempered-tinted (original)

(4) AS-2 — Tempered-with after market tint

(5) AS-3 — Tempered-tinted (with additional after market tint)

(6) AS-14 — Glass/Plastic

(7) Glazing removed prior to accident

(8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 2 26. LR 2 27. RR 2

28. BL 1 29. Roof 0 30. Other 0

(0) No glazing

(1) Fixed

(2) Closed

(3) Partially opened

(4) Fully opened

(7) Glazing removed prior to accident

(9) Unknown

Glazing Damage from Impact Forces

31. WS 1 32. LF 1 33. RF 1 34. LR 1 35. RR 1

36. BL 1 37. Roof 0 38. Other 0

(0) No glazing

(1) No glazing damage from impact forces

(2) Glazing in place and cracked from impact forces

(3) Glazing in place and holed from impact forces

(4) Glazing out-of-place (cracked or not) and not holed from impact forces

(5) Glazing out-of-place and holed from impact forces

(6) Glazing disintegrated from impact forces

(7) Glazing removed prior to accident

(9) Unknown if damaged

Glazing Damage from Occupant Contact

39. WS 4 40. LF 1 41. RF 1 42. LR 1 43. RR 1

44. BL 1 45. Roof 0 46. Other 0

(0) No glazing

(1) No occupant contact to glazing

(2) Glazing contacted by occupant but no glazing damage

(3) Glazing in place and cracked by occupant contact

(4) Glazing in place and holed by occupant contact

(5) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact

(6) Glazing out-of-place by occupant contact and holed by occupant contact

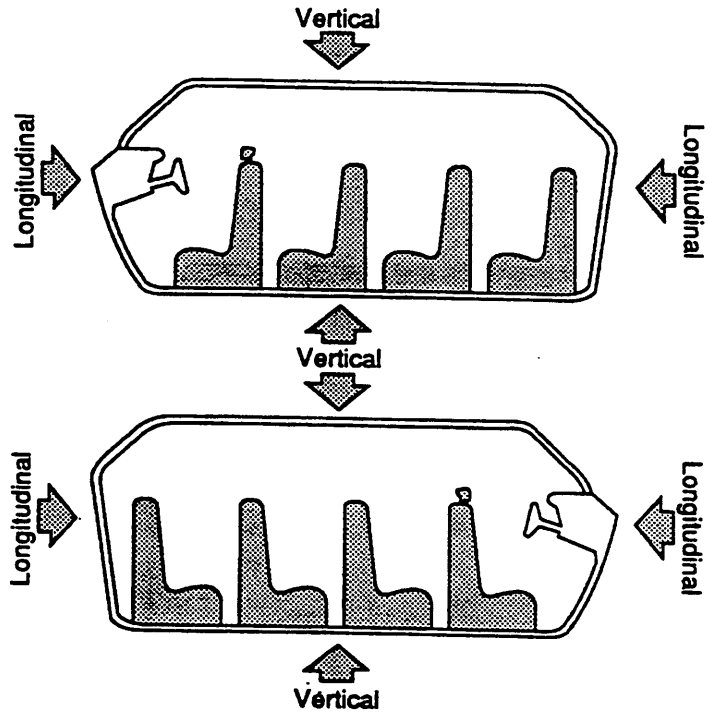
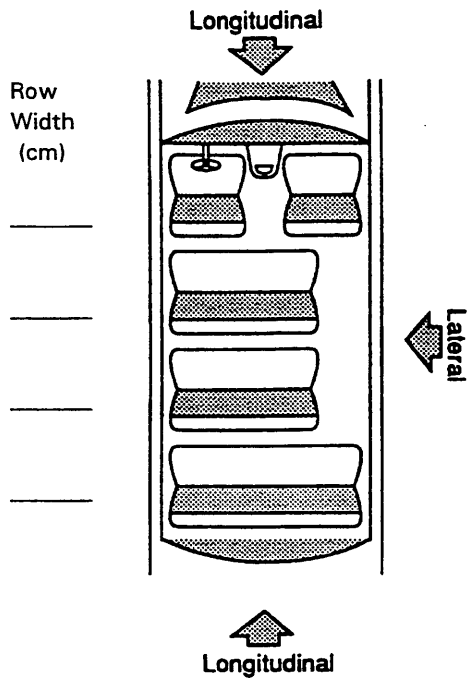
(7) Glazing removed prior to accident

(8) Glazing disintegrated by occupant contact

(9) Unknown if contacted by occupant

INTRUSION WORKSHEET

NOTE: SKETCH INTRUDED AREAS



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)			INTRUSION	DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	=		
		—		=		
		—		=		
		—		=		
		—		=		
		—		=		
		—		=		
		—		=		
		—		=		
		—		=		
		—		=		
		—		=		
		—		=		
		—		=		
		—		=		
		—		=		

Document no more than the 15 most severe intrusions

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

INTRUDING COMPONENT

Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify): _____

Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

LOCATION OF INTRUSION

Front Seat
 (11) Left
 (12) Middle
 (13) Right

Fourth Seat
 (41) Left
 (42) Middle
 (43) Right

Second Seat
 (21) Left
 (22) Middle
 (23) Right

(97) Catastrophic
 (98) Other enclosed area (specify) _____

(99) Unknown

Third Seat
 (31) Left
 (32) Middle
 (33) Right

MAGNITUDE OF INTRUSION

- (1) ≥ 3 centimeters but < 8 centimeters
- (2) ≥ 8 centimeters but < 15 centimeters
- (3) ≥ 15 centimeters but < 30 centimeters
- (4) ≥ 30 centimeters but < 46 centimeters
- (5) ≥ 46 centimeters but < 61 centimeters
- (6) ≥ 61 centimeters
- (7) Catastrophic
- (9) Unknown

DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. <u>no</u>	48. <u>Intrusion</u>	49. <u></u>	50. <u></u>
2nd	51. <u></u>	52. <u></u>	53. <u></u>	54. <u></u>
3rd	55. <u></u>	56. <u></u>	57. <u></u>	58. <u></u>
4th	59. <u></u>	60. <u></u>	61. <u></u>	62. <u></u>
5th	63. <u></u>	64. <u></u>	65. <u></u>	66. <u></u>
6th	67. <u></u>	68. <u></u>	69. <u></u>	70. <u></u>
7th	71. <u></u>	72. <u></u>	73. <u></u>	74. <u></u>
8th	75. <u></u>	76. <u></u>	77. <u></u>	78. <u></u>
9th	79. <u></u>	80. <u></u>	81. <u></u>	82. <u></u>
10th	83. <u></u>	84. <u></u>	85. <u></u>	86. <u></u>

STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
------------------	---	--------------	---	-------------

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

STEERING COLUMN

INSTRUMENT PANEL

87. Steering Column Type

- (1) Fixed column
 (2) Tilt column
 (3) Telescoping column
 (4) Tilt and telescoping column
 (8) Other column type (specify): _____

(9) Unknown

88. Tilt Steering Column Adjustment

- (0) No tilt steering column
 (1) Full up
 (2) Between full up and center
 (3) Center
 (4) Between center and full down
 (5) Full down
 (9) Unknown

89. Telescoping Steering Column Adjustment

- (0) No telescoping steering column
 (1) Full back
 (2) Between full back and midpoint
 (3) Midpoint
 (4) Between midpoint and full forward
 (5) Full forward
 (9) Unknown

90. Steering Rim/Spoke Deformation

- Code actual measured
 deformation to the nearest centimeter
 (00) No steering rim deformation
 (01-14) Actual measured value in centimeters
 (15) 15 centimeters or more
 (98) Observed deformation cannot be measured
 (99) Unknown

91. Location of Steering Rim/Spoke Deformation

- (00) No steering rim deformation

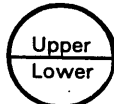
Quarter Sections

- (01) Section A
 (02) Section B
 (03) Section C
 (04) Section D



Half Sections

- (05) Upper half of rim/spoke
 (06) Lower half of rim/spoke
 (07) Left half of rim/spoke
 (08) Right half of rim/spoke



- (09) Complete steering wheel collapse
 (10) Undetermined location
 (99) Unknown

92. Odometer Reading

_____ kilometers

Code to the nearest 1,000 kilometers

- (000) No odometer
 (001) Less than 1,500 kilometers
 (500) 499,500 kilometers or more
 (999) Unknown

_____ 2506 miles X 1.6093 = _____ 4,033 kilometers

Source: veh inspection

93. Instrument Panel Damage from Occupant Contact?

- (0) No
 (1) Yes
 (9) Unknown

94. Type of Knee Bolster Covering

- (0) No knee bolster
 (1) Padded
 (2) Rigid plastic
 (8) Other (specify): _____
 (9) Unknown

95. Knee Bolsters Deformed from Occupant Contact?

- (0) No knee bolster
 (1) No deformation
 (2) Yes - deformation
 (9) Unknown

96. Did Glove Compartment Door Open During Collision(s)?

- (0) No glove compartment door
 (1) No - door did not open
 (2) Yes - door opened
 (9) Unknown

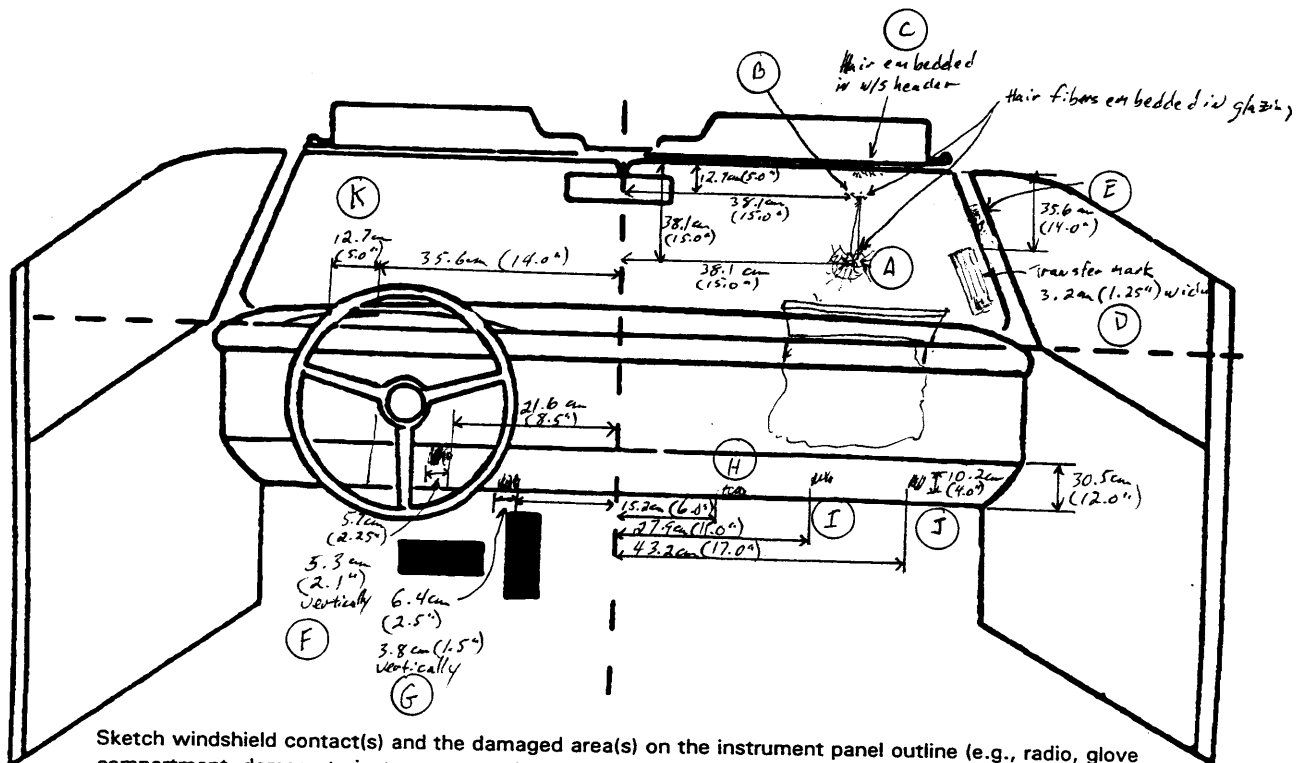
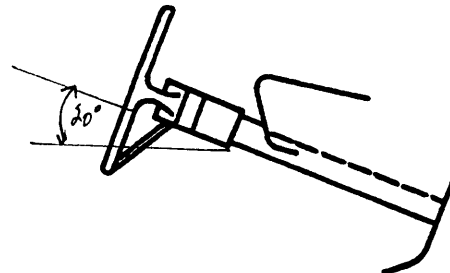
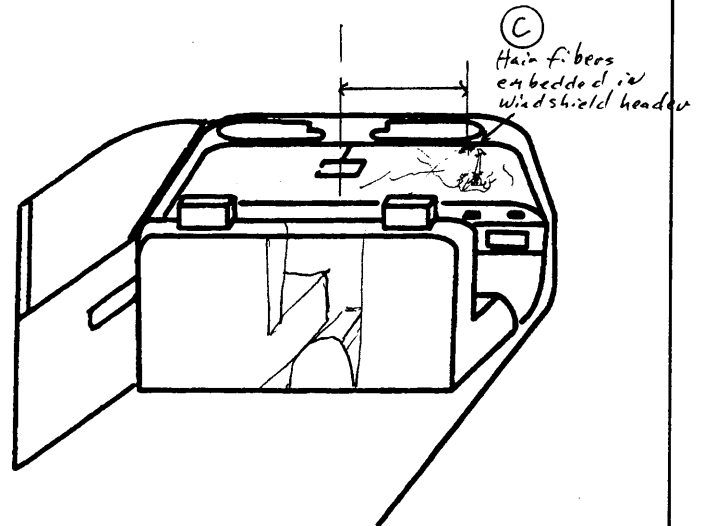
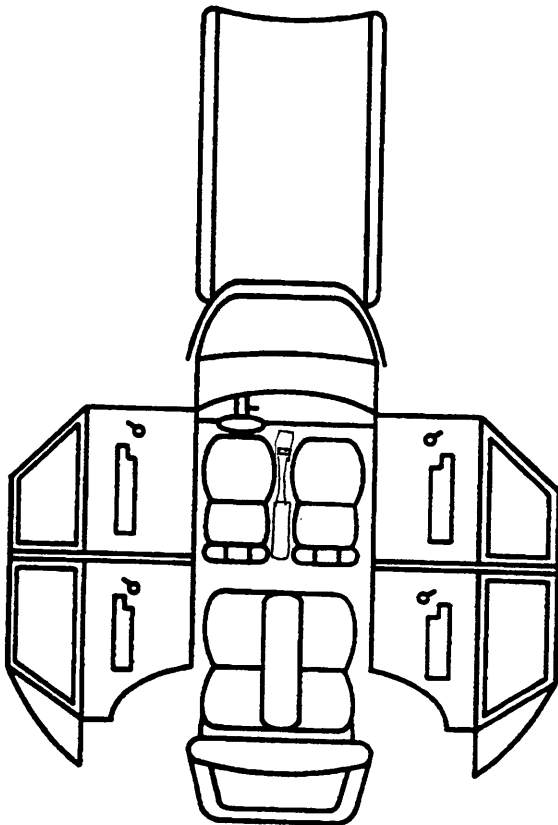
97. Adaptive (Assistive) Driving Equipment

- (0) No adaptive driving equipment
 (1) Adaptive driving equipment installed (Check all that apply.)
☐ Hand controls for braking/acceleration
☐ Steering control devices (attached to OEM steering wheel)
☐ Steering knob attached to steering wheel
☐ Low effort power steering (unit or device)
☐ Replacement steering wheel (i.e., reduced diameter)
☐ Joy-stick steering controls
☐ Wheelchair tie-downs
☐ Modification to seat belts (specify): _____
☐ Additional or relocated switches (specify): _____
☐ Raised roof
☐ Wall-mounted head rest (used behind wheelchair)
☐ Other adaptive device (specify): _____

(9) Unknown

VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	001	2	Head	Typical Spider web pattern w/ hair fibers embedded in glazing	1
B	001	2	Head	Slit in glazing 25.4cm (10.0") long with hair fibers embedded in glazing	1
C	201	2	Head	Hair fibers (black) embedded in fabric	1
D	001	2	(R) Arm/hand	Transfer on wind shield	1
E	103	2	(R) Arm/hand	Scuff mark on upper A-pillar	1
F	007	1	(L) Knee	Scuff mark	1
G	014	1	(R) Knee	Scuff mark	1
H	013	2	Lower torso/Low	Extremities. Scratch marks [8.9cm (3.5")]	1
I	013	2	" "	Scuff marks	1
J	013	2	" "	Scuff marks	1
K	010	1	(L) Arm	Scuff mark on instrument panel/eyebrow	2
L					
M					
N					

FRONT

- (001) Windshield
 (002) Mirror
 (003) Sunvisor
 (004) Steering wheel rim
 (005) Steering wheel hub/spoke
 (006) Steering wheel (combination of codes 004 and 005)
 (007) Steering column, transmission selector lever, other attachment
 (008) Cellular telephone or CB radio
 (009) Add on equipment (e.g., tape deck, air conditioner)
 (010) Left instrument panel and below
 (011) Center instrument panel and below
 (012) Right instrument panel and below
 (013) Glove compartment door
 (014) Knee bolster
 (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
 (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
 (017) Windshield reinforced by exterior object, (specify):
 (019) Other front object (specify):

CODES FOR INTERIOR COMPONENTS

LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
 (052) Left side hardware or armrest
 (053) Left A (A1/A2)-pillar
 (054) Left B-pillar
 (055) Other left pillar (specify):
 (056) Left side window glass
 (057) Left side window frame
 (058) Left side window sill
 (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
 (060) Other left side object (specify):

RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests
 (102) Right side hardware or armrest
 (103) Right A (A1/A2)-pillar
 (104) Right B-pillar
 (105) Other right pillar (specify):
 (106) Right side window glass
 (107) Right side window frame
 (108) Right side window sill
 (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
 (110) Other right side object (specify):

INTERIOR

- (151) Seat, back support
 (152) Belt restraint webbing/buckle
 (153) Belt restraint B-pillar or door frame attachment point
 (154) Other restraint system component (specify):
 (155) Head restraint system
 (160) Other occupants (specify):
 (161) Interior loose objects
 (162) Child safety seat (specify):
 (163) Other interior object (specify):

AIR BAG

- (170) Air bag-driver side
 (175) Air bag compartment cover-driver side
 (180) Air bag-passenger side
 (185) Air bag compartment cover-passenger side
 (190) Other air bag (specify)
 (195) Other air bag compartment cover (specify)

ROOF

- (201) Front header
 (202) Rear header
 (203) Roof left side rail
 (204) Roof right side rail
 (205) Roof or convertible top

FLOOR

- (251) Floor (including toe pan)
 (252) Floor or console mounted transmission lever, including console
 (253) Parking brake handle
 (254) Foot controls including parking brake

REAR

- (301) Backlight (rear window)
 (302) Backlight storage rack, door, etc.
 (303) Other rear object (specify):

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
 (402) Steering control devices (attached to OEM steering wheel)
 (403) Steering knob attached to steering wheel
 (405) Replacement steering wheel (i.e., reduced diameter)
 (406) Joy stick steering controls
 (407) Wheelchair tie-downs
 (408) Modification to seat belts, (specify):
 (409) Additional or relocated switches, (specify):
 (410) Raised roof
 (411) Wall mounted head rest (used behind wheel chair)
 (412) Other adaptive device (specify):

CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
 (2) Probable
 (3) Possible
 (9) Unknown

MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a child safety seat is present, encode the data on the back of this page 11.

If the vehicle has automatic restraints available, encode the appropriate data on page 6.

		Left	Center	Right
FIRST	A-Availability	4	/	4
	B-Evidence of usage	00		04
	C-Used in this crash?	00		00
	D-Proper Use	00		00
	E-Failure Modes	00		0
	F-Anchorage Adjustment	4		3
SECOND	A-Availability	4	3	4
	B-Evidence of usage	00	00	00
	C-Used in this crash?	00	00	00
	D-Proper Use	0	0	0
	E-Failure Modes	0	0	0
	F-Anchorage Adjustment	1	0	1
OTHER	A-Availability			
	B-Evidence of usage			
	C-Used in this crash?			
	D-Proper Use			
	E-Failure Modes			
	F-Anchorage Adjustment			

A-Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): _____

- (9) Unknown

B/C-Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): _____

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify): _____

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): _____
- (99) Unknown if belt used

D-Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____
- (8) Other improper use of manual belt system (specify): _____

- (9) Unknown

F-Shoulder Belt Upper Anchorage Adjustment

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

E-Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____
- (6) Broken retractor
- (7) Combination of above (specify): _____
- (8) Other manual belt failure (specify): _____
- (9) Unknown

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

		Frontal Air Bags--Left Front	Frontal Air Bags-Right Front	Other Air Bag
F I R S T	Availability/Function	/	/	0
	Deployment	/	/	0
	Failure	/	/	0

Air Bag System Availability/Function

- (0) Not equipped/not available
(1) Air bag

Non-functional

- (2) Air bag disconnected (specify):

(3) Air bag not reinstalled
(9) Unknown

**Air Bag System Deployment
(This Occupant Position)**

- (0) Not equipped/not available
(1) Deployed during accident (as a result of impact)
(2) Deployed inadvertently just prior to accident
(3) Deployed, accident sequence undetermined
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
(5) Unknown if deployed
(7) Nondeployed
(9) Unknown

Are There Indications of Air Bag System Failure? (This Occupant Position)

- (0) Not equipped/not available
(1) No
(2) Yes (specify):

(9) Unknown

AUTOMATIC BELTS

		Left	Right
F I R S T	A-Availability/Function	0	0
	B-Use	/	/
	C-Type	/	/
	D-Proper Use	/	/
	E-Failure Modes	/	/

A-Automatic (Passive) Belt System Availability/Function

- (0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
(9) Unknown

B-Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative
(1) Automatic belt in use
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)
(3) Automatic belt use unknown
(9) Unknown

C-Automatic (Passive) Belt System Type

- (0) Not equipped/not available
(1) Non-motorized system
(2) Motorized system
(9) Unknown

D-Proper Use of Automatic (Passive) Belt System

- (0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
(4) Automatic shoulder belt worn behind back
(5) Automatic belt worn around more than one person
(6) Lap portion of automatic belt worn on abdomen
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):

- (8) Other improper use of automatic belt system (specify):

(9) Unknown

E-Automatic (Passive) Belt Failure Modes During Accident

- (0) Not equipped/not available/not in use
(1) No automatic belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify):

(6) Broken retractor
(7) Combination of above (specify):
(8) Other automatic belt failure (specify):

(9) Unknown

FIRST SEAT FRONTAL AIR BAGS

NOTES: Encode the applicable data *for the driver and first seat passenger* in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
A-Type of air bag?	1	1
B-Flaps open at tear points?	2	2
C-Flaps damaged?	1	2
D-Air bag damaged?	01	01
E-Source of air bag damage	01	01
F-Air bag tethered?	2 (4)	2 (2)
G-Air bag have vent ports?	2 (2)	2 (1)
H-Other occupant contact air bag?	1	1
I-Occupant wearing eyewear?	9	9

A-Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

B-Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

C-Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
Deformed
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

D-Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify):

E-Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify):
- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

F-Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps):
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

G-Did The Air Bag Have Vent Ports?

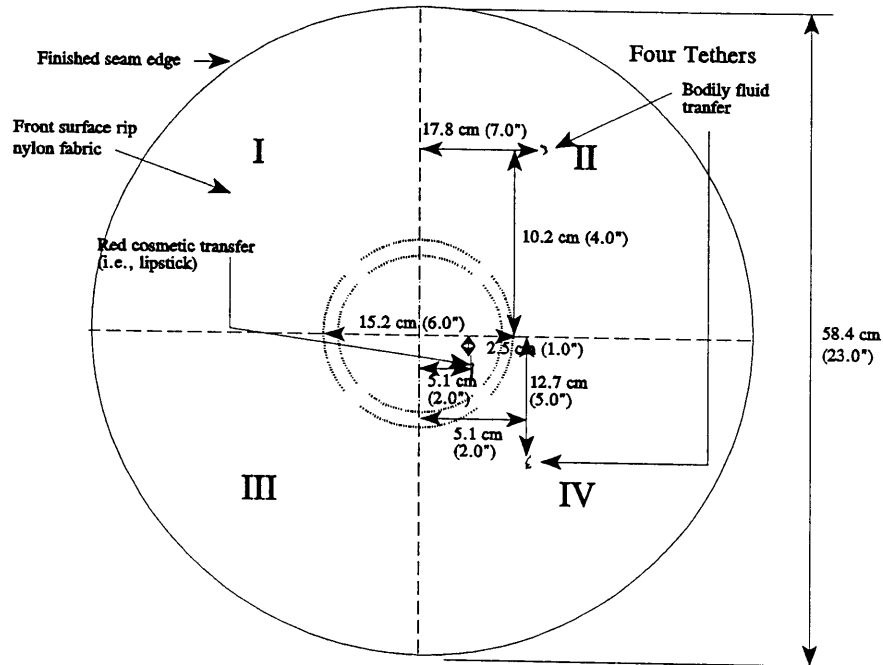
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports):
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

H-Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

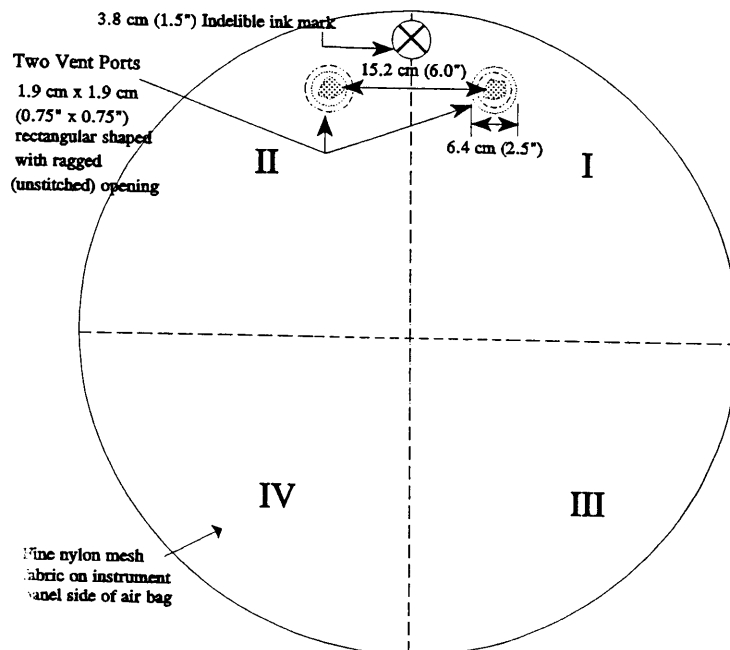
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

I-Was This Occupant Wearing Eye-wear?

- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown



Tethered Driver Side Air Bag of Vehicle #1 (Front Side)

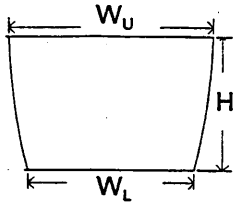


Tethered Driver Side Air Bag of Vehicle #1 (Reverse Side)

DRIVER AIR BAG SKETCHES (Cont'd)

3. DRIVER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width (W_U) _____ width (W_L) _____
 height (H) _____



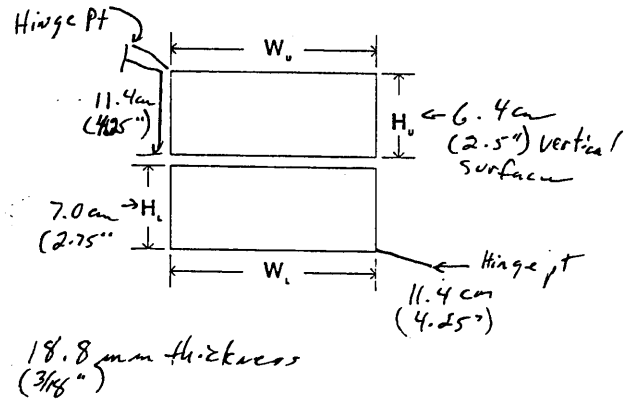
4. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

b. Lower Flap

width (W_U) _____ width (W_L) _____

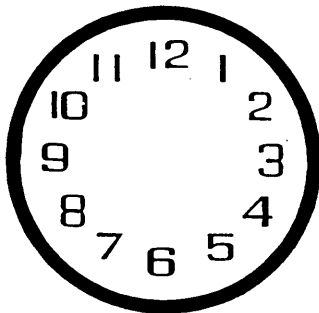
height (H_U) _____ height (H_L) _____



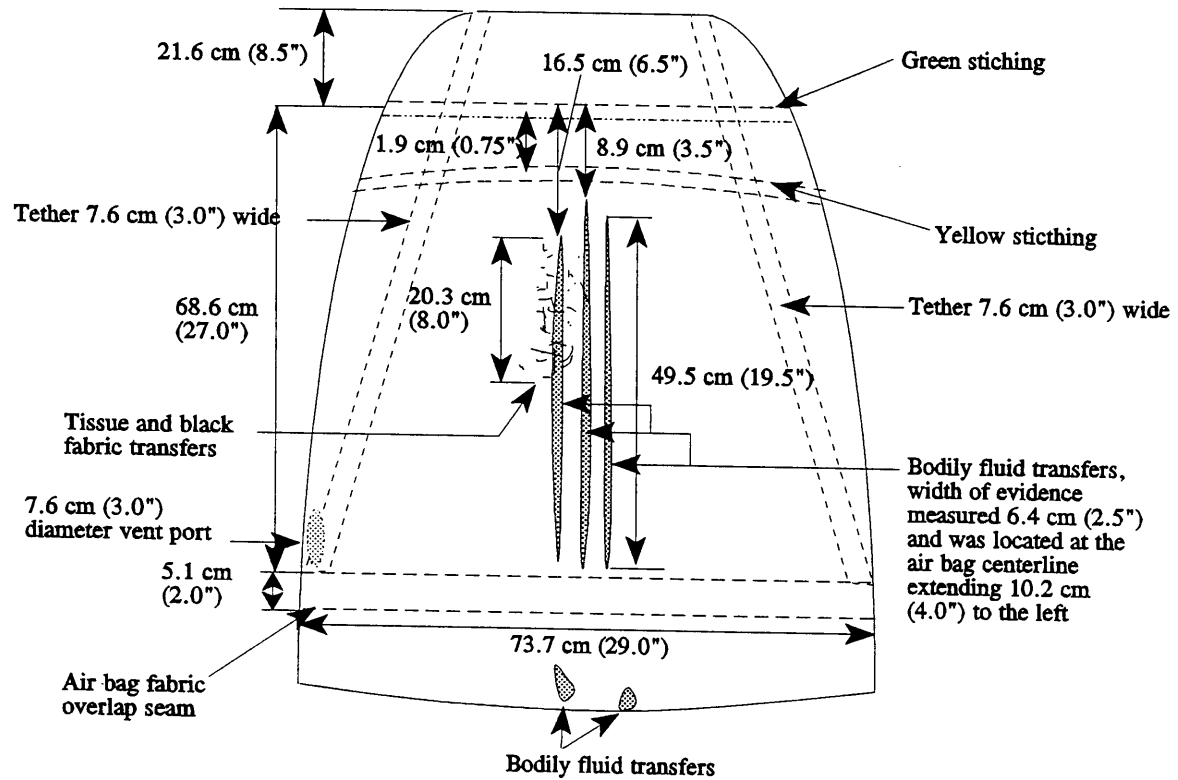
5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

7. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS



Tethered Passenger Side Air Bag Vehicle #1

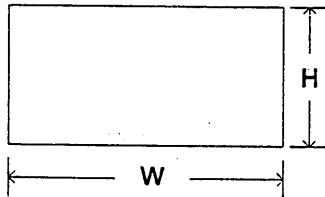


PASSENGER AIR BAG SKETCHES (Cont'd)

3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width (W) _____

height (H) _____



4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

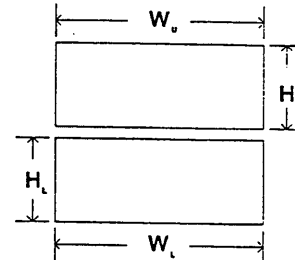
b. Lower Flap

width (W_U) _____

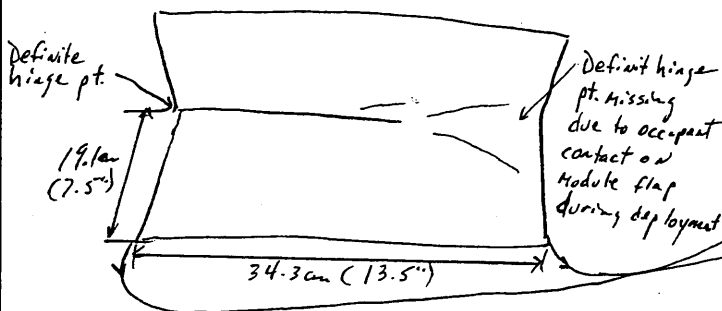
width (W_L) _____

height (H_U) _____

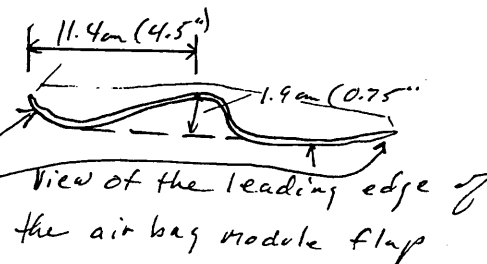
height (H_L) _____



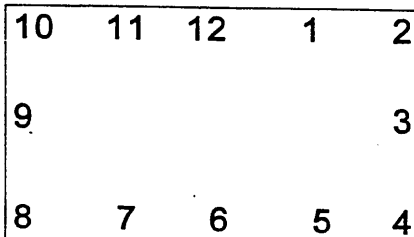
5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE



6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS



7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS



"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Front)

2. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)

"OTHER" AIR BAG SKETCHES (Cont'd)

3. SKETCH AIR BAG MODULE FLAP AND SIZE OR OPENING FOR AIRBAG

4. SKETCH AIR BAG VENT PORTS

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	A-Head Restraint Type/Damage	3		3
	B-Seat Type	01		01
	C-Seat Orientation	1		1
	D-Seat Track Position	3		6
	E-Seat Back Incline Pre/Post Impact	23		23
	F-Seat Performance	1		1
SECOND	A-Head Restraint Type/Damage	0	0	0
	B-Seat Type	03	03	03
	C-Seat Orientation	1	1	1
	D-Seat Track Position	1	1	1
	E-Seat Back Incline Pre/Post Impact	01	01	01
	F-Seat Performance	1	1	1
THIRD	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			
OTHER	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

HEAD RESTRAINTS/SEAT EVALUATION

A-Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other (specify): _____
- (9) Unknown

B-Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Box mounted seat (i.e., van type)
- (10) Other seat type (specify): _____
- (99) Unknown

C-Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____
- (9) Unknown

D-Seat Track Adjusted Position Prior To Impact

- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track

Adjustable Seat Track

- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

E-Seat Back Incline Prior and Post Impact

- (00) Occupant not seated or no seat
- (01) Not adjustable

Upright prior to impact

- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position

Slightly reclined prior to impact

- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position

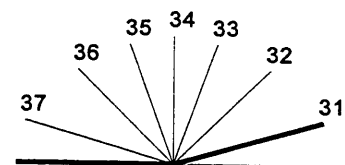
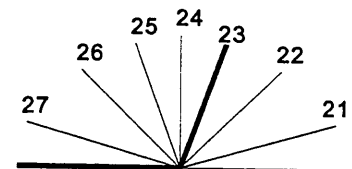
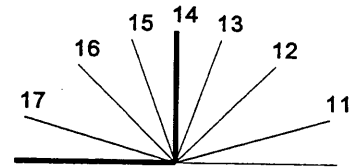
Completely reclined prior to impact

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position

- (99) Unknown

F-Seat Performance (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): _____
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____
- (7) Combination of above (specify): _____
- (8) Other (specify): _____
- (9) Unknown

Coding diagrams for *Seat Back Incline Position Prior and Post Impact*

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify): _____
- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify): _____
- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify): _____
- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify): _____
- (29) Unknown orientation

(99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

- 5. Child Safety Seat Tether Usage
- Note: Options Below Are Used for Variables 3-5.
- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

- 6. Child Safety Seat Make/Model
- (Specify make/model and occupant number)

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No [] Yes [☒]

Describe indications of ejection and body parts involved in partial ejection(s):

25.4 (10.0") long slit in windshield resulting from RE occupant's head penetration

Occupant Number	2					
Ejection	2					
(Note on Vehicle Interior Sketch) Ejection Area	1					
Ejection Medium	3					
Medium Status	2					

Ejection

- (1) Complete ejection
(2) Partial ejection
(3) Ejection, Unknown degree
(9) Unknown

Ejection Area

- (1) Windshield
(2) Left front
(3) Right front
(4) Left rear
(5) Right rear
(6) Rear

(7) Roof

- (8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown**Ejection Medium**

- (1) Door/hatch/tailgate
(2) Nonfixed roof structure
(3) Fixed glazing
(4) Nonfixed glazing (specify):

(5) Integral structure

- (8) Other medium (specify):

(9) Unknown**Medium Status (Immediately Prior to Impact)**

- (1) Open
(2) Closed
(3) Integral structure
(9) Unknown

ENTRAPMENT No [] Yes []

Describe entrapment mechanism:

Component(s):

(Note on vehicle interior sketch)



OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum CA 96-07

3. Vehicle Number 01

4. Occupant Number 01

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 35
Code actual age at time of accident.
(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex 2

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height 999
Code actual height to the nearest
centimeter.
(999) Unknown

_____ inches X 2.54 = _____ centimeters

8. Occupant's Weight 999
Code actual weight to the nearest
kilogram.
(999) Unknown

_____ pounds X .4536 = _____ kilograms

9. Occupant's Role 1

(1) Driver

(2) Passenger

(9) Unknown

OCCUPANT'S SEATING

10. Occupant's Seat Position 11

Front Seat

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify): _____

(15) On or in the lap of another occupant

Second Seat

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify): _____

(25) On or in the lap of another occupant

Third Seat

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify): _____

(35) On or in the lap of another occupant

Fourth Seat

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify): _____

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify): _____

(99) Unknown

11. Occupant's Posture 9

(0) Normal posture

Abnormal posture

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with
another occupant or to look out a rear
window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in
front of seat

(8) Other abnormal posture (specify): _____

(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

0

13. Ejection Area

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)
(specify): _____
- (9) Unknown

0

14. Ejection Medium

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): _____
- (5) Integral structure
- (8) Other medium (specify): _____
- (9) Unknown

015. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.
(specify): _____
- (9) Unknown

17. Occupant Mobility

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons
(specify): _____
- (9) Unknown

4

BELT SYSTEM FUNCTION

<p>18. Manual (Active) Belt System Availability <u>4</u></p> <p>(0) None available</p> <p>(1) Belt removed/destroyed</p> <p>(2) Shoulder belt</p> <p>(3) Lap belt</p> <p>(4) Lap and shoulder belt</p> <p>(5) Belt available—type unknown</p> <p><i>Integral Belt Partially Destroyed</i></p> <p>(6) Shoulder belt (lap belt destroyed/removed)</p> <p>(7) Lap belt (shoulder belt destroyed/removed)</p> <p>(8) Other belt (specify): _____</p> <p>(9) Unknown _____</p> <p>19. Manual (Active) Belt System Use <u>07</u></p> <p>(00) None used, not available, or belt removed/destroyed</p> <p>(01) Inoperative (specify): _____</p> <p>(02) Shoulder belt _____</p> <p>(03) Lap belt _____</p> <p>(04) Lap and shoulder belt _____</p> <p>(05) Belt used—type unknown _____</p> <p>(08) Other belt used (specify): _____</p> <p>(12) Shoulder belt used with child safety seat _____</p> <p>(13) Lap belt used with child safety seat _____</p> <p>(14) Lap and shoulder belt used with child safety seat _____</p> <p>(15) Belt used with child safety seat—type unknown _____</p> <p>(18) Other belt used with child safety seat (specify): _____</p> <p>(99) Unknown if belt used _____</p>	<p>22. Manual Shoulder Belt Upper Anchorage Adjustment <u>4</u></p> <p>(0) No manual shoulder belt</p> <p>(1) No upper anchorage adjustment for manual shoulder belt</p> <p><i>Adjustable shoulder Belt Upper Anchorage</i></p> <p>(2) In full up position</p> <p>(3) In mid position</p> <p>(4) In full down position</p> <p>(5) Position unknown</p> <p>(9) Unknown if position has adjustable upper anchorage adjustment</p> <p>23. Automatic (Passive) Belt System Availability/Function <u>0</u></p> <p>(0) Not equipped/not available</p> <p>(1) 2 point automatic belts</p> <p>(2) 3 point automatic belts</p> <p>(3) Automatic belts - type unknown</p> <p><i>Non-functional</i></p> <p>(4) Automatic belts destroyed or rendered inoperative</p> <p>(9) Unknown</p> <p>24. Automatic (Passive) Belt System Use <u>0</u></p> <p>(0) Not equipped/not available/destroyed or rendered inoperative</p> <p>(1) Automatic belt in use</p> <p>(2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____</p> <p>(3) Automatic belt use unknown _____</p> <p>(9) Unknown</p>
<p>20. Proper Use of Manual (Active) Belts <u>0</u></p> <p>(0) None used or not available</p> <p>(1) Belt used properly</p> <p>(2) Belt used properly with child safety seat</p> <p><i>Belt Used Improperly</i></p> <p>(3) Shoulder belt worn under arm</p> <p>(4) Shoulder belt worn behind back or seat</p> <p>(5) Belt worn around more than one person</p> <p>(6) Lap belt worn on abdomen</p> <p>(7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____</p> <p>(8) Other improper use of manual belt system (specify): _____</p> <p>(9) Unknown _____</p> <p>21. Manual (Active) Belt Failure Modes During Accident <u>0</u></p> <p>(0) No manual belt used or not available</p> <p>(1) No manual belt failure(s)</p> <p>(2) Torn webbing (stretched webbing not included)</p> <p>(3) Broken buckle or latchplate</p> <p>(4) Upper anchorage separated</p> <p>(5) Other anchorage separated (specify): _____</p> <p>(6) Broken retractor _____</p> <p>(7) Combination of above (specify): _____</p> <p>(8) Other manual belt failure (specify): _____</p> <p>(9) Unknown _____</p>	<p>25. Automatic (Passive) Belt System Type <u>0</u></p> <p>(0) Not equipped/not available</p> <p>(1) Non-motorized system</p> <p>(2) Motorized system</p> <p>(9) Unknown</p> <p>26. Proper Use of Automatic (Passive) Belt System <u>0</u></p> <p>(0) Not equipped/not available/not used</p> <p>(1) Automatic belt used properly</p> <p>(2) Automatic belt used properly with child safety seat</p> <p><i>Automatic Belt Used Improperly</i></p> <p>(3) Automatic shoulder belt worn under arm</p> <p>(4) Automatic shoulder belt worn behind back</p> <p>(5) Automatic belt worn around more than one person</p> <p>(6) Lap portion of automatic belt worn on abdomen</p> <p>(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____</p> <p>(8) Other improper use of automatic belt system (specify): _____</p> <p>(9) Unknown _____</p> <p>27. Automatic (Passive) Belt Failure Modes During Accident <u>0</u></p> <p>(0) Not equipped/not available/not in use</p> <p>(1) No automatic belt failure(s)</p> <p>(2) Torn webbing (stretched webbing not included)</p> <p>(3) Broken buckle or latchplate</p> <p>(4) Upper anchorage separated</p> <p>(5) Other anchorage separated (specify): _____</p> <p>(6) Broken retractor _____</p> <p>(7) Combination of above (specify): _____</p> <p>(8) Other automatic belt failure (specify): _____</p> <p>(9) Unknown _____</p>

POLICE REPORTED RESTRAINT USE

28. Police Reported Belt Use

- (0) None used
 (1) Police did not indicate belt use
 (2) Shoulder belt
 (3) Lap belt
 (4) Lap and shoulder belt
 (5) Belt used, type not specified
 (6) Child safety seat
 (7) Automatic belt
 (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function

- (0) No air bag available
 (1) Police did not indicate air bag availability/function
 (2) Deployed
 (3) Not deployed
 (4) Unknown if deployed
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- [☒] Vehicle inspection
 [] Official injury data
 [] Driver/occupant interview
 [] Other (specify):

[] Unknown if belt used

AIR BAG SYSTEM FUNCTION

30. Frontal Air Bag System

Availability/Function
 (This Occupant Position)

- (0) Not equipped/not available
 (1) Air bag

Non-functional

- (2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
 (9) Unknown

31. Frontal Air Bag System Deployment
(This Occupant Position)

- (0) Not equipped/not available
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown

32. Other Than First Seat Frontal Air Bag
Availability/Function
(This Occupant Position)

- (0) Not equipped/not available
 (1) Air bag

Non-functional

- (2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
 (9) Unknown

Specify type of "other" air bag present:

33. Air Bag(s) Deployment, Other Than First
Seat Frontal (This Occupant Position)

- (0) Not equipped with an "other" air bag
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown

34. Are There Indications of Air Bag System
Failure?

- (This Occupant Position)
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify):

(9) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 9

- (0) Not equipped/not available
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)
(3) One previous accident with deployment
(4) More than one previous accident with at least one deployment
(8) Previous accidents, unknown deployment status
(9) Unknown

36. Type of Air Bag 1

- (0) Not equipped/not available
(1) Original manufacturer installed system
(2) Retrofitted air bag
(3) Replacement air bag
(8) Unknown type of air bag
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 9

- (0) Not equipped/not available
(1) No prior maintenance
(2) Yes, prior maintenance (specify): _____

(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 01

- (00) Not equipped/not available

Code the accident event sequence number that initiated the air bag deployment

- (96) Deployed, unknown event
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

39. CDC For Air Bag Deployment Impact 1

- (0) Not equipped/not available
(1) Highest delta V
(2) Second highest delta V
(3) Other non-coded delta V (specify): _____

- (6) Deployed, unknown event
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + 0 0 16

- (_000) Not equipped/not available

Code the value of the delta V for the impact that initiated the air bag deployment

- (_996) Deployment, unknown longitudinal Delta V
(_997) Not deployed
(_998) Unknown if deployed
(_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2

- (0) Not equipped/not available
(1) No
(2) Yes
(3) Deployed, unknown if flap(s) opened at designated tear points
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 1

- (0) Not equipped/not available
(1) No
(2) Yes (specify): _____
(3) Deployed, unknown if air bag module cover flap(s) damaged
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

43. Was There Damage To The Air Bag? 01

- (00) Not equipped/not available
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured
(03) Cut
(04) Torn
(05) Holed
(06) Burned
(07) Abraded
(88) Other damage (specify): _____
(95) Damaged, details unknown
(96) Deployed, unknown if damaged
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM
EVALUATION *continued*

44. Source of Air Bag Damage 01
 (00) Not equipped/not available
 (01) Not damaged
 (02) Object worn by occupant, (specify):
 (03) Object carried by occupant, (specify):
 (04) Adaptive/assistive controls, (specify):
 (05) Fire in vehicle
 (06) Thermal burns
 (07) Rescue or emergency efforts
 (88) Other damage source (specify):
 (95) Damaged, unknown source
 (96) Deployed, unknown if damaged
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown
45. Was The Air Bag Tethered? 2
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of tether straps):
 (3) Deployed, unknown if tethered
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 2
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of vent ports):
 (3) Deployed, unknown if vent ports present
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 1
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify):
 (3) Deployed, unknown if other occupant contact to air bag
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 9
 (0) Not air bag equipped/air bag not available
 (1) No
 (2) Eyeglasses/sunglasses
 (3) Contact lenses
 (4) Deployed, unknown if eyewear worn
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION

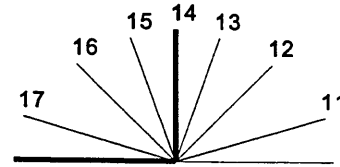
49. Head Restraint Type/Damage by Occupant at This Occupant Position 3
 (0) No head restraints
 (1) Integral—no damage
 (2) Integral—damaged during accident
 (3) Adjustable—no damage
 (4) Adjustable—damaged during accident
 (5) Add-on—no damage
 (6) Add-on—damaged during accident
 (8) Other (specify):
 (9) Unknown
50. Seat Type (this Occupant Position) 01
 (00) Occupant not seated or no seat
 (01) Bucket
 (02) Bucket with folding back
 (03) Bench
 (04) Bench with separate back cushions
 (05) Bench with folding back(s)
 (06) Split bench with separate back cushions
 (07) Split bench with folding back(s)
 (08) Pedestal (i.e., column supported)
 (09) Box mounted seat (i.e., van type)
 (10) Other seat type (specify):
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1
 (0) Occupant not seated or no seat
 (1) Forward facing seat
 (2) Rear facing seat
 (3) Side facing seat (inward)
 (4) Side facing seat (outward)
 (8) Other (specify):
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 3
 (0) Occupant not seated or no seat
 (1) Non-adjustable seat track
- Adjustable Seat Track*
 (2) Seat at forward most track position
 (3) Seat between forward most and middle track positions
 (4) Seat at middle track position
 (5) Seat between middle and rear most track positions
 (6) Seat at rear most track position
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 23

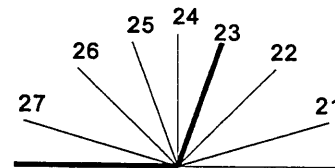
- (00) Occupant not seated or no seat
 (01) Not adjustable

Upright prior to impact

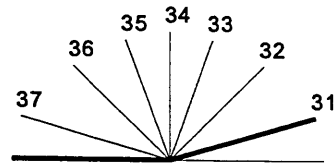
- (11) Moved to completely rearward position
 (12) Moved to rearward midrange position
 (13) Moved to slightly rearward position
 (14) Retained pre-impact position
 (15) Moved to slightly forward position
 (16) Moved to forward midrange position
 (17) Moved to completely forward position

***Slightly reclined prior to impact***

- (21) Moved to completely rearward position
 (22) Moved to rearward midrange position
 (23) Retained pre-impact position
 (24) Moved to upright position
 (25) Moved to slightly forward position
 (26) Moved to forward midrange position
 (27) Moved to completely forward position

***Completely reclined prior to impact***

- (31) Retained pre-impact position
 (32) Moved to rearward midrange position
 (33) Moved to slightly rearward position
 (34) Moved to upright position
 (35) Moved to slightly forward position
 (36) Moved to forward midrange position
 (37) Moved to completely forward position



(99) Unknown

54. Seat Performance (this Occupant Position) +

- (0) Occupant not seated or no seat
 (1) No seat performance failure(s)
 (2) Seat adjusters failed
 (3) Seat back folding locks or "seat back" failed (specify): _____
 (4) Seat track/anchors failed
 (5) Deformed by impact of occupant
 (6) Deformed by passenger compartment intrusion, (specify): _____
 (7) Combination of above (specify): _____
 (8) Other (specify): _____
 (9) Unknown

CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 000
(000) No child safety seat
Applicable codes are found in your NASS CDS
Data Collection, Coding and Editing
(950) Built-in child safety seat
(997) Other make/model (specify):

(998) Unknown make/model
(999) Unknown if child safety seat used

56. Type of Child Safety Seat 0
(0) No child safety seat
(1) Infant seat
(2) Toddler seat
(3) Convertible seat
(4) Booster seat - with shield
(5) Booster seat - without shield
(7) Other type child safety seat (specify):

(8) Unknown child safety seat type
(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 01
(00) No child safety seat

Designed for Rear Facing for This Age/Weight

(01) Rear facing
(02) Forward facing
(08) Other orientation (specify):

(09) Unknown orientation

Designed For Forward Facing for This Age/Weight

(11) Rear facing
(12) Forward facing
(18) Other orientation (specify):

(19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

(21) Rear facing
(22) Forward facing
(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 01

59. Child Safety Seat Shield Usage 00

60. Child Safety Seat Tether Usage 00

Note: Options below applicable to
Variables OA58-OA60.

(00) No child safety seat

Not Designed With Harness/Shield/Tether

(01) After market harness/shield/tether
added, not used
(02) After market harness/shield/tether used
(03) Child safety seat used, but no after market
harness/shield/tether added
(09) Unknown if harness/shield/tether
added or used

Designed With Harness/Shield/Tether

(11) Harness/shield/tether not used
(12) Harness/shield/tether used
(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

(21) Harness/shield/tether not used
(22) Harness/shield/tether used
(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES61. Injury Severity (Police Rating) 9

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 3

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):

- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

- (9) Unknown

64. Hospital Stay 99

- (00) Not Hospitalized
- _____ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 99

- _____ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

STOP WORK HERE**VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

TO BE CODED BY THE ZONE CENTER**INJURY CONSEQUENCES****66. Time to Death** 00

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal
(96) Fatal - ruled disease
(99) Unknown

67. 1st Medically Reported Cause of Death 00**68. 2nd Medically Reported Cause of Death** 00**69. 3rd Medically Reported Cause of Death** 00

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

70. Number of Recorded Injuries for This Occupant 00

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries
(97) Injured, details unknown
(99) Unknown if injured

TRAUMA DATA**71. Glasgow Coma Scale (GCS) Score** 00
(at Medical Facility)

- (00) Not injured
(01) Injured - not treated at medical facility
(02) No GCS Score at medical facility
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.
(97) Injured, details unknown
(99) Unknown if injured

72. Was the Occupant Given Blood? 1

- (1) No - blood not given
(2) Yes - blood given

(specify units):

- (9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO₃ 00

- (00) Not injured
(01) Injured, ABGs not measured or reported
(02-50) Code the actual value of the HCO₃
(96) ABGs reported, HCO₃ unknown
(97) Injured, details unknown
(99) Unknown if injured

BELT USE DETERMINATION**74. Primary Source of Belt Use Determination** 1

(0) Not equipped/not available/destroyed or rendered inoperative

- (1) Vehicle inspection
(2) Official injury data
(3) Driver/occupant interview
(8) Other (specify):
(9) Unknown if belt used



OCCUPANT ASSESSMENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

2. Case Number - Stratum CA 96-07

3. Vehicle Number 01

4. Occupant Number 02

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 02
Code actual age at time of accident.
(00) Less than one year old (specify by month):

(97) 97 years and older
(99) Unknown

6. Occupant's Sex 1
(1) Male
(2) Female-not reported pregnant
(3) Female-pregnant-1st trimester(1st-3rd month)
(4) Female-pregnant-2nd trimester(4th-6th month)
(5) Female-pregnant-3rd trimester(7th-9th month)
(6) Female-pregnant-term unknown
(9) Unknown

7. Occupant's Height 122
Code actual height to the nearest
centimeter.
(999) Unknown

 inches X 2.54 = centimeters

8. Occupant's Weight 025
Code actual weight to the nearest
kilogram.
(999) Unknown

 pounds X .4536 = kilograms

9. Occupant's Role 2
(1) Driver
(2) Passenger
(9) Unknown

OCCUPANT'S SEATING

10. Occupant's Seat Position 13
Front Seat

- (11) Left side
- (12) Middle
- (13) Right side
- (14) Other (specify):
- (15) On or in the lap of another occupant

Second Seat

- (21) Left side
- (22) Middle
- (23) Right side
- (24) Other (specify):
- (25) On or in the lap of another occupant

Third Seat

- (31) Left side
- (32) Middle
- (33) Right side
- (34) Other (specify):
- (35) On or in the lap of another occupant

Fourth Seat

- (41) Left side
- (42) Middle
- (43) Right side
- (44) Other (specify):
- (45) On or in the lap of another occupant

- (97) In or on unenclosed area
- (98) Other seat (specify):
- (99) Unknown

11. Occupant's Posture 0
(0) Normal posture

Abnormal posture

- (1) Kneeling or standing on seat
- (2) Lying on or across seat
- (3) Kneeling, standing or sitting in front of seat
- (4) Sitting sideways or turned to talk with another occupant or to look out a rear window
- (5) Sitting on a console
- (6) Lying back in a reclined seat position
- (7) Bracing with feet or hands on a surface in front of seat
- (8) Other abnormal posture (specify):

(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection 0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area 0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)
(specify): _____
- (9) Unknown

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): _____
- (5) Integral structure
- (8) Other medium (specify): _____
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 0

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.
(specify): _____
- (9) Unknown

17. Occupant Mobility 0

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons
(specify): _____
- (9) Unknown

BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4
- (0) None available
 - (1) Belt removed/destroyed
 - (2) Shoulder belt
 - (3) Lap belt
 - (4) Lap and shoulder belt
 - (5) Belt available—type unknown
- Integral Belt Partially Destroyed*
- (6) Shoulder belt (lap belt destroyed/removed)
 - (7) Lap belt (shoulder belt destroyed/removed)
 - (8) Other belt (specify): _____
 - (9) Unknown
19. Manual (Active) Belt System Use 20
- (00) None used, not available, or belt removed/destroyed
 - (01) Inoperative (specify): _____
 - (02) Shoulder belt
 - (03) Lap belt
 - (04) Lap and shoulder belt
 - (05) Belt used—type unknown
 - (08) Other belt used (specify): _____
 - (12) Shoulder belt used with child safety seat
 - (13) Lap belt used with child safety seat
 - (14) Lap and shoulder belt used with child safety seat
 - (15) Belt used with child safety seat—type unknown
 - (18) Other belt used with child safety seat (specify): _____
 - (99) Unknown if belt used
20. Proper Use of Manual (Active) Belts 0
- (0) None used or not available
 - (1) Belt used properly
 - (2) Belt used properly with child safety seat
- Belt Used Improperly*
- (3) Shoulder belt worn under arm
 - (4) Shoulder belt worn behind back or seat
 - (5) Belt worn around more than one person
 - (6) Lap belt worn on abdomen
 - (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____
 - (8) Other improper use of manual belt system (specify): _____
 - (9) Unknown
21. Manual (Active) Belt Failure Modes During Accident 0
- (0) No manual belt used or not available
 - (1) No manual belt failure(s)
 - (2) Torn webbing (stretched webbing not included)
 - (3) Broken buckle or latchplate
 - (4) Upper anchorage separated
 - (5) Other anchorage separated (specify): _____
 - (6) Broken retractor
 - (7) Combination of above (specify): _____
 - (8) Other manual belt failure (specify): _____
 - (9) Unknown
22. Manual Shoulder Belt Upper Anchorage Adjustment 3
- (0) No manual shoulder belt
 - (1) No upper anchorage adjustment for manual shoulder belt
- Adjustable shoulder Belt Upper Anchorage*
- (2) In full up position
 - (3) In mid position
 - (4) In full down position
 - (5) Position unknown
 - (9) Unknown if position has adjustable upper anchorage adjustment
23. Automatic (Passive) Belt System Availability/Function 0
- (0) Not equipped/not available
 - (1) 2 point automatic belts
 - (2) 3 point automatic belts
 - (3) Automatic belts - type unknown
- Non-functional*
- (4) Automatic belts destroyed or rendered inoperative
 - (9) Unknown
24. Automatic (Passive) Belt System Use 0
- (0) Not equipped/not available/destroyed or rendered inoperative
 - (1) Automatic belt in use
 - (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____
 - (3) Automatic belt use unknown
 - (9) Unknown
25. Automatic (Passive) Belt System Type 0
- (0) Not equipped/not available
 - (1) Non-motorized system
 - (2) Motorized system
 - (9) Unknown
26. Proper Use of Automatic (Passive) Belt System 1
- (0) Not equipped/not available/not used
 - (1) Automatic belt used properly
 - (2) Automatic belt used properly with child safety seat
- Automatic Belt Used Improperly*
- (3) Automatic shoulder belt worn under arm
 - (4) Automatic shoulder belt worn behind back
 - (5) Automatic belt worn around more than one person
 - (6) Lap portion of automatic belt worn on abdomen
 - (7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____
 - (8) Other improper use of automatic belt system (specify): _____
 - (9) Unknown
27. Automatic (Passive) Belt Failure Modes During Accident 0
- (0) Not equipped/not available/not in use
 - (1) No automatic belt failure(s)
 - (2) Torn webbing (stretched webbing not included)
 - (3) Broken buckle or latchplate
 - (4) Upper anchorage separated
 - (5) Other anchorage separated (specify): _____
 - (6) Broken retractor
 - (7) Combination of above (specify): _____
 - (8) Other automatic belt failure (specify): _____
 - (9) Unknown

POLICE REPORTED RESTRAINT USE

28. Police Reported Belt Use

- (0) None used
 (1) Police did not indicate belt use
 (2) Shoulder belt
 (3) Lap belt
 (4) Lap and shoulder belt
 (5) Belt used, type not specified
 (6) Child safety seat
 (7) Automatic belt
 (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function

- (0) No air bag available
 (1) Police did not indicate air bag availability/function
 (2) Deployed
 (3) Not deployed
 (4) Unknown if deployed
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- ☒ Vehicle inspection
☐ Official injury data
☐ Driver/occupant interview
☐ Other (specify):

☐ Unknown if belt used

AIR BAG SYSTEM FUNCTION

30. Frontal Air Bag System

Availability/Function
 (This Occupant Position)

- (0) Not equipped/not available
 (1) Air bag

Non-functional

- (2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
 (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position)

- (0) Not equipped/not available
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position)

- (0) Not equipped/not available
 (1) Air bag

Non-functional

- (2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
 (9) Unknown

Specify type of "other" air bag present:

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position)

- (0) Not equipped with an "other" air bag
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown

34. Are There Indications of Air Bag System Failure? (This Occupant Position)

- (0) Not equipped/not available
 (1) No
 (2) Yes (specify):

(9) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 9

- (0) Not equipped/not available
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)
(3) One previous accident with deployment
(4) More than one previous accident with at least one deployment
(8) Previous accidents, unknown deployment status
(9) Unknown

36. Type of Air Bag 1

- (0) Not equipped/not available
(1) Original manufacturer installed system
(2) Retrofitted air bag
(3) Replacement air bag
(8) Unknown type of air bag
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? —

- (0) Not equipped/not available
(1) No prior maintenance
(2) Yes, prior maintenance (specify):

(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 01

- (00) Not equipped/not available
Code the accident event sequence number that initiated the air bag deployment

- (96) Deployed, unknown event
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

39. CDC For Air Bag Deployment Impact 1

- (0) Not equipped/not available
(1) Highest delta V
(2) Second highest delta V
(3) Other non-coded delta V (specify):

- (6) Deployed, unknown event
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + 016

- (_000) Not equipped/not available

Code the value of the delta V for the impact that initiated the air bag deployment

- (_996) Deployment, unknown longitudinal Delta V
(_997) Not deployed
(_998) Unknown if deployed
(_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2

- (0) Not equipped/not available
(1) No
(2) Yes
(3) Deployed, unknown if flap(s) opened at designated tear points
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 2

- (0) Not equipped/not available
(1) No
(2) Yes (specify): See Case Report - Flap deformed
(3) Deployed, unknown if air bag module cover flap(s) damaged
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

43. Was There Damage To The Air Bag? 01

- (00) Not equipped/not available
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured
(03) Cut
(04) Torn
(05) Holed
(06) Burned
(07) Abraded
(88) Other damage (specify):

- (95) Damaged, details unknown
(96) Deployed, unknown if damaged
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

**FIRST SEAT FRONTAL AIR BAG SYSTEM
EVALUATION** *continued*

44. Source of Air Bag Damage 01
 (00) Not equipped/not available
 (01) Not damaged
 (02) Object worn by occupant, (specify):
 (03) Object carried by occupant, (specify):
 (04) Adaptive/assistive controls, (specify):
 (05) Fire in vehicle
 (06) Thermal burns
 (07) Rescue or emergency efforts
 (08) Other damage source (specify):
 (95) Damaged, unknown source
 (96) Deployed, unknown if damaged
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown
45. Was The Air Bag Tethered? 2
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of tether straps):
 (3) Deployed, unknown if tethered
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 2
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of vent ports):
 (3) Deployed, unknown if vent ports present
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 1
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify):
 (3) Deployed, unknown if other occupant contact to air bag
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 9
 (0) Not air bag equipped/air bag not available
 (1) No
 (2) Eyeglasses/sunglasses
 (3) Contact lenses
 (4) Deployed, unknown if eyewear worn
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION

49. Head Restraint Type/Damage by Occupant at This Occupant Position 3
 (0) No head restraints
 (1) Integral—no damage
 (2) Integral—damaged during accident
 (3) Adjustable—no damage
 (4) Adjustable—damaged during accident
 (5) Add-on—no damage
 (6) Add-on—damaged during accident
 (8) Other (specify):
 (9) Unknown
50. Seat Type (this Occupant Position) 01
 (00) Occupant not seated or no seat
 (01) Bucket
 (02) Bucket with folding back
 (03) Bench
 (04) Bench with separate back cushions
 (05) Bench with folding back(s)
 (06) Split bench with separate back cushions
 (07) Split bench with folding back(s)
 (08) Pedestal (i.e., column supported)
 (09) Box mounted seat (i.e., van type)
 (10) Other seat type (specify):
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1
 (0) Occupant not seated or no seat
 (1) Forward facing seat
 (2) Rear facing seat
 (3) Side facing seat (inward)
 (4) Side facing seat (outward)
 (8) Other (specify):
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 6
 (0) Occupant not seated or no seat
 (1) Non-adjustable seat track
- Adjustable Seat Track*
 (2) Seat at forward most track position
 (3) Seat between forward most and middle track positions
 (4) Seat at middle track position
 (5) Seat between middle and rear most track positions
 (6) Seat at rear most track position
 (9) Unknown

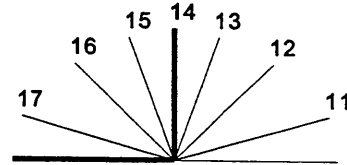
HEAD RESTRAINT AND SEAT EVALUATION *continued*

53. Seat Back Incline Prior and Post Impact 23
 (00) Occupant not seated or no seat
 (01) Not adjustable

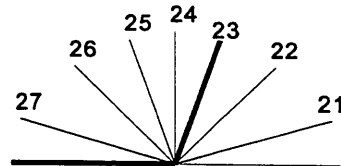
(29° rearward of vertical)

Upright prior to impact

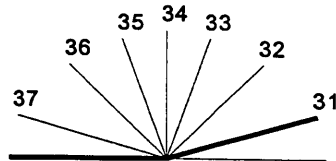
- (11) Moved to completely rearward position
 (12) Moved to rearward midrange position
 (13) Moved to slightly rearward position
 (14) Retained pre-impact position
 (15) Moved to slightly forward position
 (16) Moved to forward midrange position
 (17) Moved to completely forward position

***Slightly reclined prior to impact***

- (21) Moved to completely rearward position
 (22) Moved to rearward midrange position
 (23) Retained pre-impact position
 (24) Moved to upright position
 (25) Moved to slightly forward position
 (26) Moved to forward midrange position
 (27) Moved to completely forward position

***Completely reclined prior to impact***

- (31) Retained pre-impact position
 (32) Moved to rearward midrange position
 (33) Moved to slightly rearward position
 (34) Moved to upright position
 (35) Moved to slightly forward position
 (36) Moved to forward midrange position
 (37) Moved to completely forward position



(99) Unknown

54. Seat Performance (this Occupant Position) _____

- (0) Occupant not seated or no seat
 (1) No seat performance failure(s)
 (2) Seat adjusters failed
 (3) Seat back folding locks or "seat back" failed
 (specify): _____
 (4) Seat track/anchors failed
 (5) Deformed by impact of occupant
 (6) Deformed by passenger compartment intrusion, (specify): _____
 (7) Combination of above (specify): _____
 (8) Other (specify): _____
 (9) Unknown

CHILD SAFETY SEAT

55. Child Safety Seat Make/Model OVJ
(000) No child safety seat
Applicable codes are found in your NASS CDS
Data Collection, Coding and Editing
(950) Built-in child safety seat
(997) Other make/model (specify):

(998) Unknown make/model
(999) Unknown if child safety seat used

56. Type of Child Safety Seat d
(0) No child safety seat
(1) Infant seat
(2) Toddler seat
(3) Convertible seat
(4) Booster seat - with shield
(5) Booster seat - without shield
(7) Other type child safety seat (specify):

(8) Unknown child safety seat type
(9) Unknown if child safety seat used

57. Child Safety Seat Orientation OV
(00) No child safety seat

Designed for Rear Facing for This Age/Weight

(01) Rear facing
(02) Forward facing
(08) Other orientation (specify):

(09) Unknown orientation

Designed For Forward Facing for This Age/Weight

(11) Rear facing
(12) Forward facing
(18) Other orientation (specify):

(19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

(21) Rear facing
(22) Forward facing
(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage OV

59. Child Safety Seat Shield Usage OV

60. Child Safety Seat Tether Usage OV

Note: Options below applicable to
Variables OA58-OA60.

(00) No child safety seat

Not Designed With Harness/Shield/Tether

(01) After market harness/shield/tether
added, not used
(02) After market harness/shield/tether used
(03) Child safety seat used, but no after market
harness/shield/tether added
(09) Unknown if harness/shield/tether
added or used

Designed With Harness/Shield/Tether

(11) Harness/shield/tether not used
(12) Harness/shield/tether used
(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

(21) Harness/shield/tether not used
(22) Harness/shield/tether used
(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES61. Injury Severity (Police Rating) 4

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 1

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):

- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 0

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

- (9) Unknown

64. Hospital Stay 00

- (00) Not Hospitalized
- _____ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 62

- _____ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

STOP WORK HERE**VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

TO BE CODED BY THE ZONE CENTER**INJURY CONSEQUENCES****66. Time to Death**

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal
(96) Fatal - ruled disease
(99) Unknown

67. 1st Medically Reported Cause of Death**68. 2nd Medically Reported Cause of Death****69. 3rd Medically Reported Cause of Death**

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

70. Number of Recorded Injuries for This Occupant

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries
(97) Injured, details unknown
(99) Unknown if injured

TRAUMA DATA**71. Glasgow Coma Scale (GCS) Score (at Medical Facility)**

- (00) Not injured
(01) Injured - not treated at medical facility
(02) No GCS Score at medical facility
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.
(97) Injured, details unknown
(99) Unknown if injured

72. Was the Occupant Given Blood?

- (1) No - blood not given
(2) Yes - blood given

(specify units):

- (9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO₃

- (00) Not injured
(01) Injured, ABGs not measured or reported
(02-50) Code the actual value of the HCO₃
(96) ABGs reported, HCO₃ unknown
(97) Injured, details unknown
(99) Unknown if injured

BELT USE DETERMINATION**74. Primary Source of Belt Use Determination**

(0) Not equipped/not available/destroyed or rendered inoperative

- (1) Vehicle inspection
(2) Official injury data
(3) Driver/occupant interview
(8) Other (specify):
(9) Unknown if belt used

Department of Transportation
National Highway Traffic Safety
Administration

OCCUPANT INJURY FORM

Form Approved
O.M.B. No. 2127-0021
NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

3. Vehicle Number

2. Case Number - Stratum

4. Occupant Number

INJURY DATA

Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.

	Source of Injury Data	Body Region	Type of Anatomic Structure	A.I.S. - 90			Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number
				Specific Anatomic Structure	Level of Injury	A.I.S. Severity					
1st	5. <u>1</u>	6. <u>3</u>	7. <u>1</u>	8. <u>10</u>	9. <u>00</u>	10. <u>6</u>	11. <u>0</u>	12. <u>185</u> (190)	13. <u>1</u>	14. <u>1</u>	15. <u>00</u>
2nd	16. <u>1</u>	17. <u>2</u>	18. <u>9</u>	19. <u>02</u>	20. <u>02</u>	21. <u>1</u>	22. <u>1</u>	23. <u>180</u>	24. <u>1</u>	25. <u>1</u>	26. <u>00</u>
3rd	27. <u>1</u>	28. <u>2</u>	29. <u>9</u>	30. <u>02</u>	31. <u>02</u>	32. <u>1</u>	33. <u>2</u>	34. <u>180</u>	35. <u>1</u>	36. <u>1</u>	37. <u>00</u>
4th	38. <u>1</u>	39. <u>1</u>	40. <u>9</u>	41. <u>04</u>	42. <u>02</u>	43. <u>1</u>	44. <u>1</u>	45. <u>201</u>	46. <u>1</u>	47. <u>1</u>	48. <u>00</u>
5th	49. <u>1</u>	50. <u>2</u>	51. <u>9</u>	52. <u>02</u>	53. <u>02</u>	54. <u>1</u>	55. <u>1</u>	56. <u>001</u>	57. <u>1</u>	58. <u>1</u>	59. <u>00</u>
6th	60. <u>1</u>	61. <u>3</u>	62. <u>9</u>	63. <u>02</u>	64. <u>02</u>	65. <u>1</u>	66. <u>2</u>	67. <u>180</u>	68. <u>1</u>	69. <u>1</u>	70. <u>00</u>
7th	71. <u>1</u>	72. <u>1</u>	73. <u>4</u>	74. <u>06</u>	75. <u>84</u>	76. <u>3</u>	77. <u>1</u>	78. <u>180</u>	79. <u>1</u>	80. <u>1</u>	81. <u>00</u>
8th	82. <u>1</u>	83. <u>1</u>	84. <u>4</u>	85. <u>06</u>	86. <u>84</u>	87. <u>3</u>	88. <u>2</u>	89. <u>180</u>	90. <u>1</u>	91. <u>1</u>	92. <u>00</u>
9th	93. <u>1</u>	94. <u>2</u>	95. <u>9</u>	96. <u>02</u>	97. <u>02</u>	98. <u>1</u>	99. <u>1</u>	100. <u>180</u>	101. <u>1</u>	102. <u>1</u>	103. <u>00</u>
10th	104. <u>1</u>	105. <u>4</u>	106. <u>4</u>	107. <u>14</u>	108. <u>99</u>	109. <u>3</u>	110. <u>3</u>	111. <u>180</u>	112. <u>1</u>	113. <u>1</u>	114. <u>00</u>

OCCUPANT INJURY CLASSIFICATION

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>		(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(4) Central
(5) Abdomen			(5) Anterior
(6) Spine		To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified	The exceptions to this rule apply to:		(9) Unknown
			(0) Whole region
Type of Anatomic Structure	<u>Whole Area</u>		
(1) Whole Area	(02) Skin - Abrasion		
(2) Vessels	(04) Skin - Contusion		
(3) Nerves	(06) Skin - Laceration		
(4) Organs (includes Muscles/ligaments)	(08) Skin - Avulsion		
(5) Skeletal (includes joints)	(10) Amputation		
(6) Head - LOC	(20) Burn		
(9) Skin	(30) Crush		
	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<u>Spine</u>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		
		Abbreviated Injury Scale	
		(1) Minor Injury	
		(2) Moderate Injury	
		(3) Serious Injury	
		(4) Severe Injury	
		(5) Critical Injury	
		(6) Maximum (untreatable)	
		(7) Injured, unknown severity	

SOURCE OF INJURY DATA	INJURY SOURCE CONFIDENCE LEVEL	DIRECT/INDIRECT INJURY
<u>OFFICIAL RECORDS</u>		
(1) Autopsy records with or without hospital/medical records	(1) Certain	(1) Direct contact injury
(2) Hospital/medical records other than emergency room (e.g., discharge summary)	(2) Probable	(2) Indirect contact injury
(3) Emergency room records only (including associated X-rays or other lab reports)	(3) Possible	(3) Noncontact injury
(4) Private physician, walk-in or emergency clinic	(9) Unknown	(7) Injured, unknown source
<u>UNOFFICIAL RECORDS</u>		
(5) Lay coroner report		
(6) E.M.S. personnel		
(7) Interviewee		
(8) Other source (specify):		
(9) Police		

INJURY SOURCES

FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify): _____
- (019) Other front object (specify): _____

LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): _____
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): _____

RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests

- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): _____
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): _____

INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): _____
- (155) Head restraint system
- (160) Other occupants (specify): _____
- (161) Interior loose objects
- (162) Child safety seat (specify): _____
- (163) Other interior object (specify): _____

AIR BAG

- (170) Air bag-driver side
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry

- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (190) Other air bag (specify) _____
- (195) Other air bag compartment cover (specify) _____

ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

FLOOR

- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): _____

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): _____
- (409) Additional or relocated switches, (specify): _____

- (410) Raised roof

- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): _____

EXTERIOR of OCCUPANT'S VEHICLE

- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify): _____
- (454) Unknown exterior objects

EXTERIOR OF OTHER MOTOR VEHICLE

- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify): _____
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify): _____
- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify): _____
- (514) Unknown exterior of other motor vehicle

OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

- (551) Ground
- (598) Other vehicle or object (specify): _____
- (599) Unknown vehicle or object

NONCONTACT INJURY

- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify): _____
- (604) Air bag exhaust gases
- (697) Injured, unknown source

OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Restrained?

___ No

___ Yes

Blood Alcohol Level
(mg/dl)

BAL = ___

Glasgow Coma
Scale Score

GCSS = ___

Units of Blood
Given

Units = ___

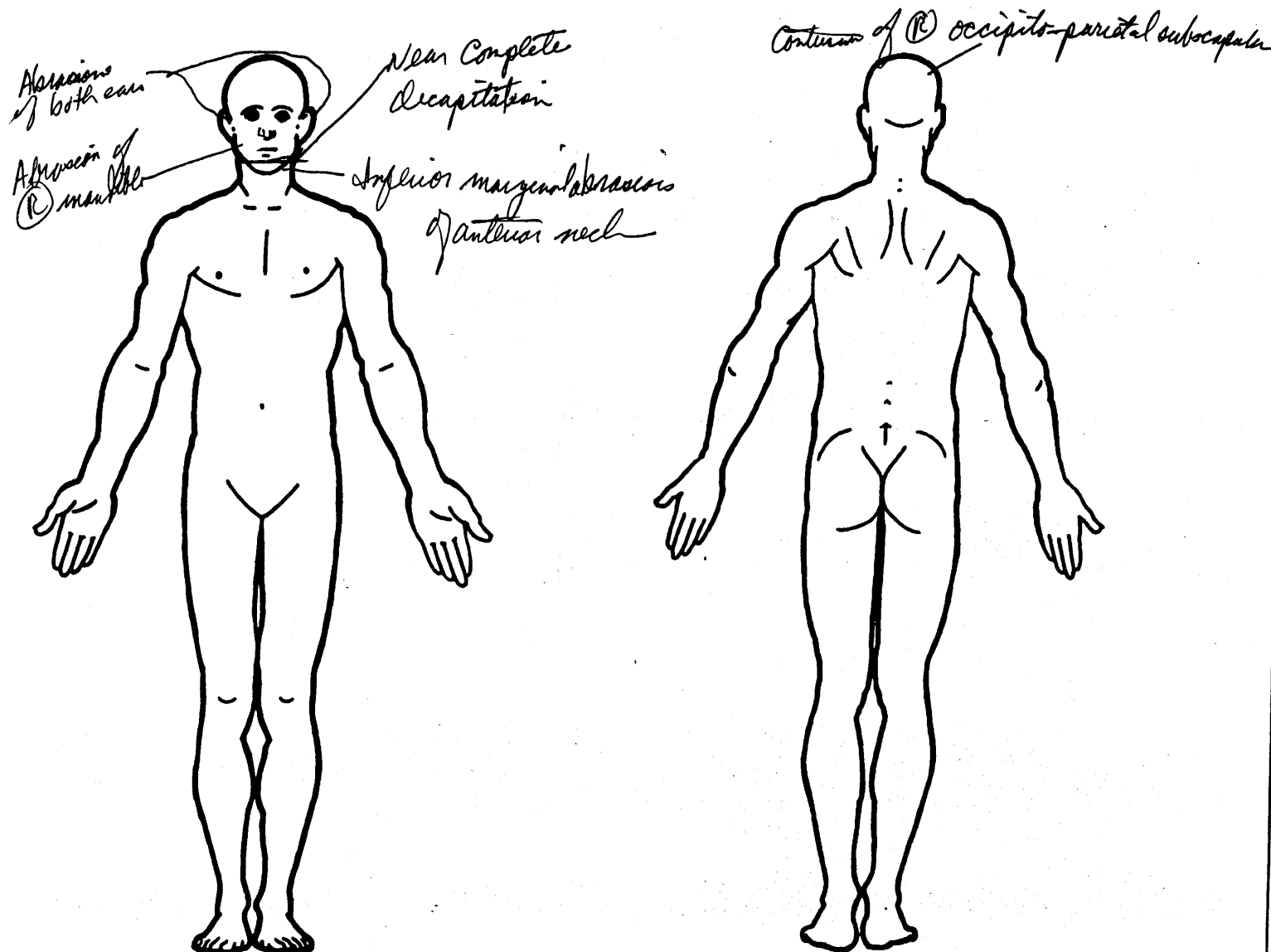
Arterial Blood Gases

pH = ___

PO₂ = ___

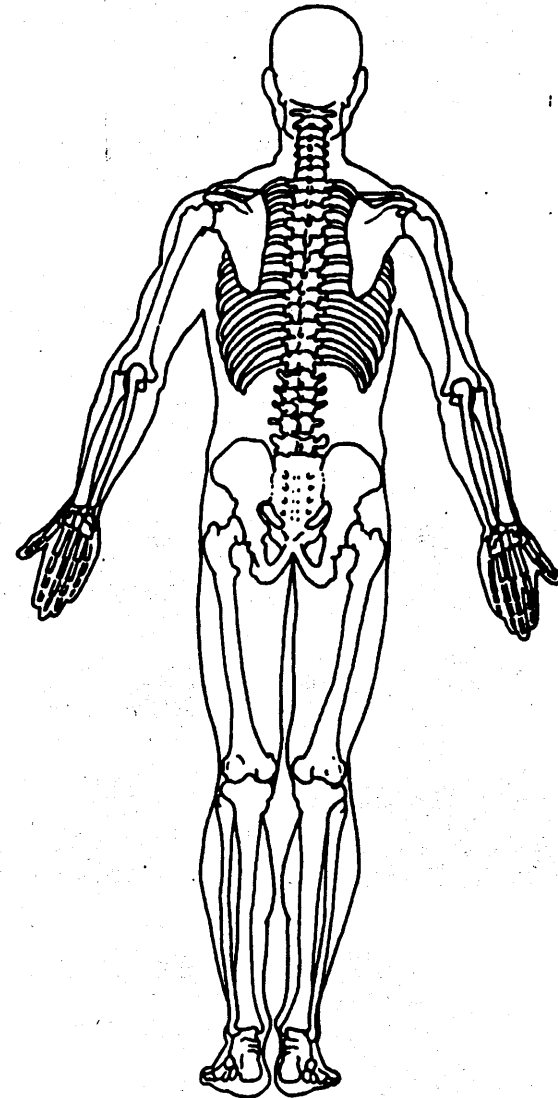
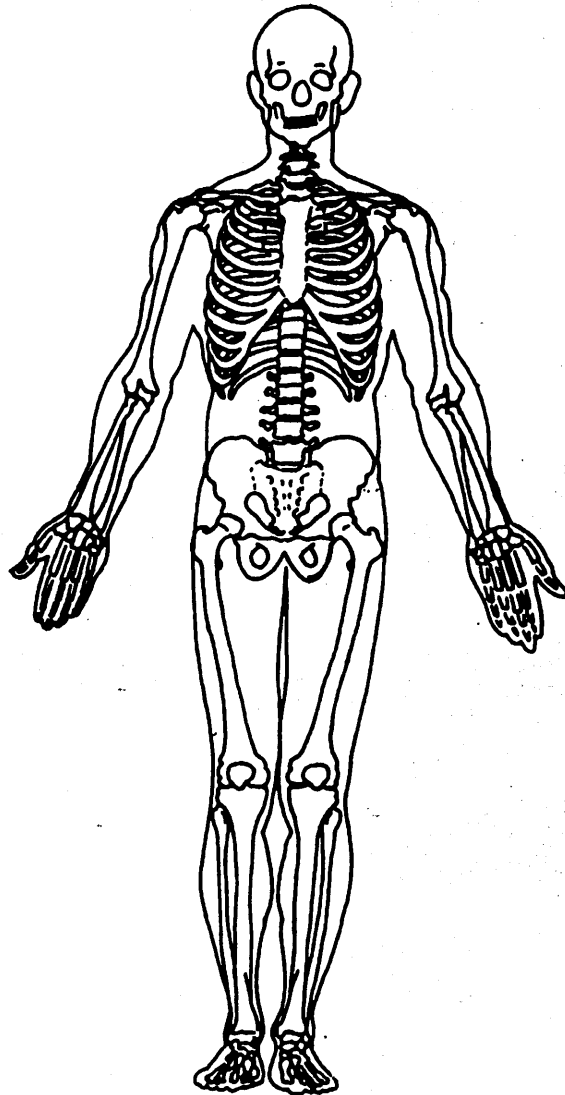
PCO₂ = ___

HCO₃ = ___



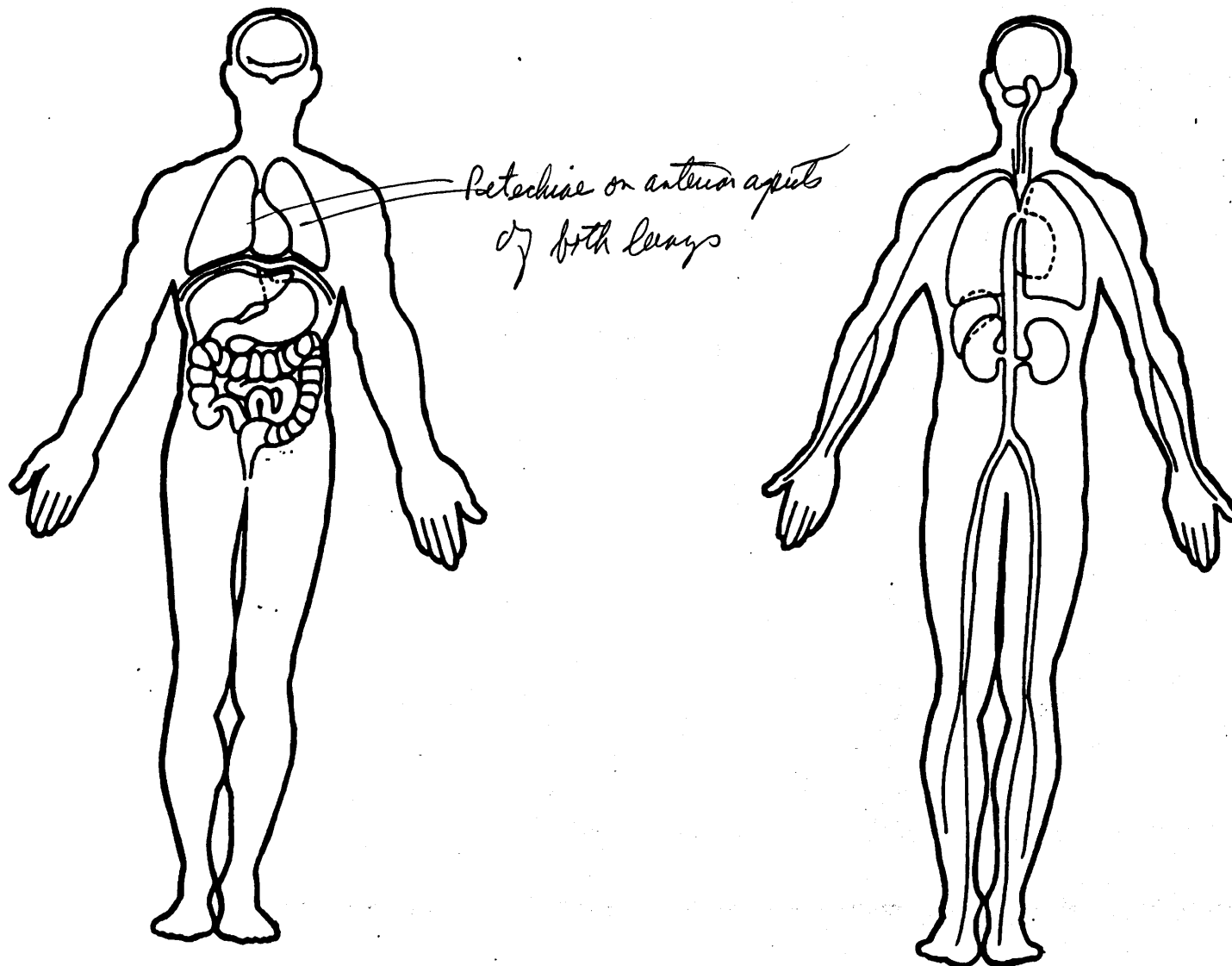
OFFICIAL INJURY DATA — SKELETAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



OFFICIAL INJURY DATA — INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





GENERAL VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number
2. Case Number - Stratum 96-07
3. Vehicle Number 02

VEHICLE IDENTIFICATION

4. Vehicle Model Year 83
Code the last two digits of the model year
(99) Unknown
5. Vehicle Make (specify): 13
Lincoln
Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(99) Unknown
6. Vehicle Model (specify): 002
Continental Mark VI
Applicable codes are found in your
NASS Data Collection, Coding and
Editing Manual.
(99) Unknown
7. Body Type 04
Note: Applicable codes may be found on
the back of this page.
8. Vehicle Identification Number
1MRBP99F5DY (Serial # omitted)
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Left justify; Slash zeros and letter Z (0 and Z)
No VIN—Code all zeros
Unknown—Code all nines
9. Vehicle Special Use (This Trip) 0
(0) No special use
(1) Taxi
(2) Vehicle used as school bus
(3) Vehicle used as other bus
(4) Military
(5) Police
(6) Ambulance
(7) Fire truck or car
(8) Other (specify): _____
(9) Unknown

OFFICIAL RECORDS

10. Police Reported Vehicle Disposition 0
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown
11. Police Reported Travel Speed 999
Code to the nearest kmph (NOTE: 000 means
less than 0.5 kmph)
(160) 159.5 kmph and above
(999) Unknown

_____ mph X 1.6093 = _____ kmph

12. Speed Limit 056
(000) No statutory limit
Code posted or statutory speed limit in kmph
(999) Unknown

35 mph X 1.6093 = _____ kmph
13. Police Reported Alcohol Presence For Driver 9
(0) No alcohol present
(1) Yes alcohol present
(7) Not reported
(8) No driver present
(9) Unknown
14. Alcohol Test Result For Driver 96
Code actual value (decimal implied
before first digit—0.xx)
(95) Test refused
(96) None given
(97) AC test performed, results unknown
(98) No driver present
(99) Unknown

Source: _____
15. Police Reported Other Drug Presence For Driver 9
(0) No other drug(s) present
(1) Yes other drug(s) present
(7) Not reported
(8) No driver present
(9) Unknown
16. Other Drug Specimen Test Result For Driver 0
(0) No specimen test given
(1) Drug(s) not found in specimen
(2) Drug(s) found in specimen, (specify): _____
(3) Specimen test given, results unknown or not
obtained
(8) No driver present
(9) Unknown if specimen test given
17. Driver's Zip Code _____
(00001) Driver not a resident of U.S. or territories

_____ Code actual 5-digit zip code
(99998) No driver present
(99999) Unknown
18. Driver's Race/Ethnic Origin 4
(1) White (non-Hispanic)
(2) Black (non-Hispanic)
(3) White (Hispanic)
(4) Black (Hispanic)
(5) American Indian, Eskimo or Aleut
(6) Asian or Pacific Islander
(7) Other (specify): _____
(8) No driver present
(9) Unknown

CODES FOR BODY TYPE

CDS APPLICABLE VEHICLES

Automobiles

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): _____

- (09) Unknown automobile type

Automobile Derivatives

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

Utility Vehicles ($\leq 4,536$ kgs GVWR)

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

Van Based Light Trucks ($\leq 4,536$ kgs GVWR)

- (20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ($\leq 4,536$ kgs GVWR)
- (23) Van based motorhome ($\leq 4,536$ kgs GVWR)
- (24) Van based school bus ($\leq 4,536$ kgs GVWR)
- (25) Van based other bus ($\leq 4,536$ kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): _____
- (29) Unknown van type

Light Conventional Trucks (Pickup style cab, $\leq 4,536$ kgs GVWR)

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)
- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

Other Light Trucks ($\leq 4,536$ kgs GVWR)

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

OTHER VEHICLES

Buses (Excludes Van Based)

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): _____
- (59) Unknown bus type

Medium/Heavy Trucks ($> 4,536$ kgs GVWR)

- (60) Step van ($> 4,536$ kgs GVWR)
- (61) Single unit straight truck ($4,536$ kgs $<$ GVWR $\leq 8,845$ kgs)
- (62) Single unit straight truck ($8,845$ kgs $<$ GVWR $\leq 11,793$ kgs)
- (63) Single unit straight truck ($> 11,793$ kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): _____
- (89) Unknown motored cycle type

Other Vehicles

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type

PRECRASH ENVIRONMENTAL DATA

19. Relation To Interchange Or Junction 2
 (0) Non-interchange area and non-junction
 (1) Interchange area related

Non-Interchange junctions

- (2) Intersection related
 (3) Driveway, alley access related
 (4) Other junction (specify) _____

(5) Unknown type of junction _____

(9) Unknown

20. Trafficway Flow 2
 (0) Not physically divided (two way traffic)
 (1) Divided trafficway-median strip without positive barrier
 (2) Divided trafficway-median strip with positive barrier
 (3) One way traffic
 (9) Unknown

21. Number Of Travel Lanes 3
 (1) One
 (2) Two
 (3) Three
 (4) Four
 (5) Five
 (6) Six
 (7) Seven or more
 (9) Unknown

22. Roadway Alignment 1
 (1) Straight
 (2) Curve right
 (3) Curve left
 (9) Unknown

23. Roadway Profile 1
 (1) Level
 (2) Uphill grade (> 2%)
 (3) Hill crest
 (4) Downhill grade (> 2%)
 (5) Sag
 (9) Unknown

24. Roadway Surface Type 2
 (1) Concrete
 (2) Bituminous (asphalt)
 (3) Brick or block
 (4) Slag, gravel, or stone
 (5) Dirt
 (8) Other (specify): _____
 (9) Unknown

25. Roadway Surface Condition 1

- (1) Dry
 (2) Wet
 (3) Snow or slush
 (4) Ice
 (5) Sand, dirt, or oil
 (8) Other (specify): _____
 (9) Unknown

26. Light Conditions 1

- (1) Daylight
 (2) Dark
 (3) Dark, but lighted
 (4) Dawn
 (5) Dusk
 (9) Unknown

27. Atmospheric Conditions 0

- (0) No adverse atmospheric-related driving conditions
 (1) Rain
 (2) Sleet/hail
 (3) Snow
 (4) Fog
 (5) Rain and fog
 (6) Sleet and fog
 (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): _____
 (9) Unknown

28. Traffic Control Device 1

- (0) No traffic control(s)
 (1) Traffic control signal (not RR crossing)

Regulatory

- (2) Stop sign
 (3) Yield sign
 (4) School zone sign
 (5) Other regulatory sign (specify): _____

(6) Warning sign (not RR crossing) _____

(7) Unknown sign

(8) Miscellaneous/other controls including RR controls (specify): _____

(9) Unknown

29. Traffic Control Device Functioning 2

- (0) No traffic control device
 (1) Traffic control device not functioning (specify): _____

(2) Traffic control device functioning properly

(9) Unknown

PRECRASH DRIVER RELATED DATA

30. Driver's Distraction/Inattention To Driving (Prior To Recognition Of Critical Event) 02
- (00) No driver present
 - (01) Attentive or not distracted
 - (02) Looked but did not see
 - Distractions*
 - (03) By other occupant(s), (specify): _____
 - (04) By moving object in vehicle (specify): _____
 - (05) While talking or listening to cellular phone (specify location and type of phone): _____
 - (06) While dialing cellular phone (specify location and type of phone): _____
 - (07) While adjusting climate controls
 - (08) While adjusting radio, cassette, CD (specify): _____
 - (09) While using other device/controls integral to vehicle (specify): _____
 - (10) While using or reaching for device/object brought into vehicle (specify): _____
 - (11) Sleepy or fell asleep
 - (12) Distracted by outside person, object, or event (specify): _____
 - (13) Eating or drinking
 - (14) Smoking related
 - (97) Distracted/inattentive, details unknown
 - (98) Other, distraction (specify): _____
 - (99) Unknown

31. Pre-Event Movement (Prior to Recognition of Critical Event) 02
- (00) No driver present
 - (01) Going straight
 - (02) Decelerating in traffic lane
 - (03) Accelerating in traffic lane
 - (04) Starting in traffic lane
 - (05) Stopped in traffic lane
 - (06) Passing or overtaking another vehicle
 - (07) Disabled or parked in travel lane
 - (08) Leaving a parking position
 - (09) Entering a parking position
 - (10) Turning right
 - (11) Turning left
 - (12) Making a U-turn
 - (13) Backing up (other than for parking position)
 - (14) Negotiating a curve
 - (15) Changing lanes
 - (16) Merging
 - (17) Successful avoidance maneuver to a previous critical event
 - (97) Other (specify): _____
 - (99) Unknown

32. Critical Precrash Event 15
- THIS VEHICLE LOSS OF CONTROL DUE TO:**
- (01) Blow out or flat tire
 - (02) Stalled engine
 - (03) Disabling vehicle failure (e.g., wheel fell off) (specify): _____
 - (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): _____
 - (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): _____
 - (06) Traveling too fast for conditions
 - (08) Other cause of control loss (specify): _____
 - (09) Unknown cause of control loss

THIS VEHICLE TRAVELLING

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (18) This vehicle decelerating
- (19) Unknown travel direction

OTHER MOTOR VEHICLE IN LANE

- (50) Other vehicle stopped
- (51) Traveling in same direction with lower steady speed
- (52) Traveling in same direction while decelerating
- (53) Traveling in same direction with higher speed
- (54) Traveling in opposite direction
- (55) In crossover
- (56) Backing
- (59) Unknown travel direction of other motor vehicle in lane

OTHER MOTOR VEHICLE ENCROACHING INTO LANE

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

PEDESTRIAN, PEDALCYCLIST, OR OTHER NONMOTORIST

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian—unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): _____
- (84) Pedalcyclist or other nonmotorist approaching roadway, (specify): _____
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): _____

OBJECT OR ANIMAL

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify): _____
- (99) Unknown

33. Attempted Avoidance Maneuver 01

- (00) No driver present
- (01) No avoidance maneuver
- (02) Braking (no lockup)
- (03) Braking (lockup)
- (04) Braking (lockup unknown)
- (05) Releasing brakes
- (06) Steering left
- (07) Steering right
- (08) Braking and steering left
- (09) Braking and steering right
- (10) Accelerating
- (11) Accelerating and steering left
- (12) Accelerating and steering right
- (98) Other action (specify):

(99) Unknown

34. Pre-Impact Stability 1

- (0) No driver present
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify):

(9) Preocrash stability unknown

35. Pre-Impact Location 1

- (0) No driver present
- (1) Stayed in original travel lane
- (2) Stayed on roadway but left original travel lane
- (3) Stayed on roadway, not known if left original travel lane
- (4) Departed roadway
- (5) Remained off roadway
- (6) Returned to roadway
- (7) Entered roadway
- (9) Unknown

36. Accident Type 68

(Note: Applicable codes on back of this page)

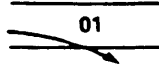

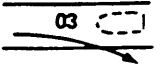
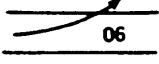
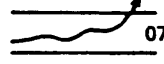
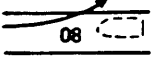
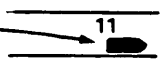

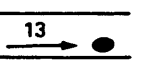
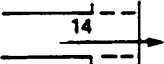
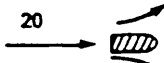
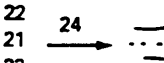
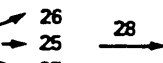
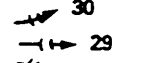
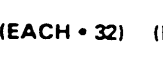
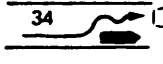
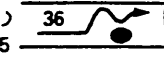
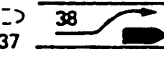
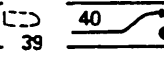
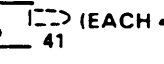
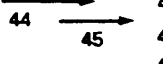
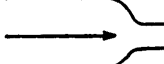



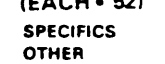



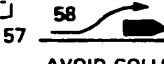
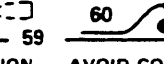
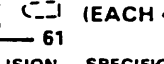



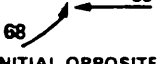
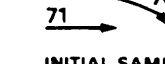
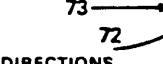

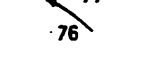

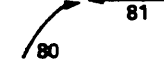
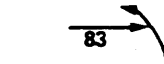
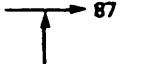


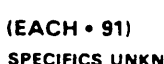
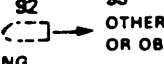

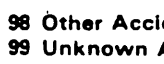


(00) No impact

Code the number of the diagram that best describes the accident circumstance

(98) Other accident type (specify):

(99) Unknown

STOP HERE IF GV07 DOES NOT EQUAL 01 - 49

Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I. Single Driver	A. Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B. Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C. Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II. Same Trafficway Same Direction	D. Rear-End	 20 STOPPED 21, 22, 23	 22 SLOWER 26, 26, 27	 24 DECEL. 29, 30, 31	 26 AVOID COLLISION WITH VEH.	 28 AVOID COLLISION WITH OBJECT (EACH • 32) SPECIFICS OTHER (EACH • 33) SPECIFICS UNKNOWN
	E. Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	 42 SPECIFICS OTHER (EACH • 42) SPECIFICS UNKNOWN (EACH • 43) SPECIFICS UNKNOWN
	F. Sideswipe Angle	 44 45 46 47	 46 45 47	 48 SPECIFICS OTHER	 49 SPECIFICS UNKNOWN	(EACH • 48) SPECIFICS OTHER (EACH • 49) SPECIFICS UNKNOWN
III. Same Trafficway Opposite Direction	G. Head-On	 50 LATERAL MOVE	 51 (EACH • 52) SPECIFICS OTHER	 53 (EACH • 53) SPECIFICS UNKNOWN		
	H. Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	 62 SPECIFICS OTHER (EACH • 62) SPECIFICS UNKNOWN (EACH • 63) SPECIFICS UNKNOWN
	I. Sideswipe Angle	 64 LATERAL MOVE	 65 (EACH • 66) SPECIFICS OTHER	 67 (EACH • 67) SPECIFICS UNKNOWN		
IV. Change Trafficway Vehicle Turning	J. Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 69 INITIAL SAME DIRECTIONS	 71 INITIAL OPPOSITE DIRECTIONS	 73 INITIAL SAME DIRECTIONS	(EACH • 74) SPECIFICS OTHER (EACH • 75) SPECIFICS UNKNOWN
	K. Turn Into Path	 76 TURN INTO SAME DIRECTION	 78 TURN INTO OPPOSITE DIRECTIONS	 80 TURN INTO OPPOSITE DIRECTIONS	 82 TURN INTO OPPOSITE DIRECTIONS	(EACH • 84) SPECIFICS OTHER (EACH • 85) SPECIFICS UNKNOWN
V. Intersecting Paths (Vehicle Damage)	L. Straight Paths	 86 87	 88 89	 90 SPECIFICS OTHER	 91 SPECIFICS UNKNOWN	(EACH • 90) SPECIFICS OTHER (EACH • 91) SPECIFICS UNKNOWN
VI. Miscellaneous	M. Backing Etc.	 92 BACKING VEH.	 93 OTHER VEH. OR OBJECT	 98 Other Accident Type	 99 Unknown Accident Type	 00 No Impact

OCCUPANT RELATED

37. Driver Presence in Vehicle 1
 (0) Driver not present
 (1) Driver present
 (9) Unknown
38. Number of Occupants This Vehicle 0 1
 (00-96) Code actual number of occupants for this vehicle
 (97) 97 or more
 (99) Unknown
39. Number of Occupant Forms Submitted 0 1

AIR BAG RELATED

40. Is this an AOPS Vehicle? 0
 (0) No (includes unknown)
 (1) Yes - researcher determined
 (2) VIN determined air bag system
 (3) VIN determined automatic (passive) belts
 (4) VIN determined air bag and automatic (passive) belts
41. Air Bag(s) Deployment, First Seat Frontal 0
 (0) Not equipped or not available
 (1) No air bags deployed
Single Air Bag Vehicle
 (2) Driver air bag deployed
 (3) Driver air bag, unknown if deployed
Multiple Air Bag Vehicle
 (4) Driver side only deployed
 (5) Passenger side only deployed
 (6) Driver and passenger side deployed
 (7) Driver and passenger side unknown if deployed
 (8) Air bag(s) deployed, details unknown
 (9) Unknown
42. Air Bag(s) Deployment, Other Than First Seat Frontal 0
 (0) Not equipped with an "other" air bag
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown

Specify type of "other" air bag present: _____

VEHICLE WEIGHT ITEMS

43. Vehicle Curb Weight 1,860
 Code weight to nearest 10 kilograms.
 (045) Less than 454 kilograms
 (612) 6,124 kilograms or more
 (999) Unknown
4,105 lbs X .4536 = 1,862 kgs
 Source: _____

44. Vehicle Cargo Weight 0,000
 Code weight to nearest 10 kilograms.
 (000) Less than 5 kilograms
 (454) 4,536 kilograms or more
 (999) Unknown
 _____ lbs X .4536 = _____ kgs

Source: Inspection/Interview**ROLLOVER DATA**

45. Rollover 00
 (00) No rollover (no overturning)
Rollover (primarily about the longitudinal axis)
 (01-16) Code the number of quarter turns
 (17) Rollover, 17 or more quarter turns (specify): _____
 (98) Rollover--end-over-end (i.e., primarily about the lateral axis)
 (99) Rollover (overturn), details unknown
46. Rollover Initiation Type 00
 (00) No rollover
 (01) Trip-over
 (02) Flip-over
 (03) Turn-over
 (04) Climb-over
 (05) Fall-over
 (06) Bounce-over
 (07) Collision with another vehicle
 (08) Other rollover initiation type specify): _____
 (98) Rollover--end-over-end
 (99) Unknown rollover initiation type
47. Location of Rollover Initiation 0
 (0) No rollover
 (1) On roadway
 (2) On shoulder--paved
 (3) On shoulder--unpaved
 (4) On roadside or divided trafficway median
 (8) Rollover--end-over-end
 (9) Unknown
48. Rollover Initiation Object Contacted 00
 (Note: Applicable codes on back of page)
49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0
 (0) No rollover
 (1) Wheels/tires
 (2) Side plane
 (3) End plane
 (4) Undercarriage
 (5) Other location on vehicle (specify): _____
 (6) Non-contact rollover forces (specify): _____
 (8) Rollover--end-over-end
 (9) Unknown
50. Direction of Initial Roll 0
 (0) No rollover
 (1) Roll right - primarily about the longitudinal axis
 (2) Roll left - primarily about the longitudinal axis
 (8) Rollover--end-over-end
 (9) Unknown roll direction

CODES FOR ROLLOVER INITIATION OBJECT CONTACTED

- (00) No rollover
- (01-30) — Vehicle Number

Noncollision

- (31) Turn-over — fall-over
- (32) No rollover impact initiation (end-over-end)
- (34) Jackknife

Collision With Fixed Object

- (41) Tree (≤ 10 cm in diameter)
- (42) Tree (> 10 cm in diameter)
- (43) Shrubbery or bush
- (44) Embankment

- (45) Breakaway pole or post (any diameter)

Nonbreakaway Pole or Post

- (50) Pole or post (≤ 10 cm in diameter)
- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)
- (52) Pole or post (> 30 cm in diameter)
- (53) Pole or post (diameter unknown)

- (54) Concrete traffic barrier
- (55) Impact attenuator
- (56) Other traffic barrier (includes guardrail)
(specify): _____

- (57) Fence
- (58) Wall
- (59) Building
- (60) Ditch or culvert
- (61) Ground
- (62) Fire hydrant
- (63) Curb
- (64) Bridge
- (68) Other fixed object (specify): _____

- (69) Unknown fixed object _____

Collision with Nonfixed Object

- (70) Passenger car, light truck, van, or other vehicle not in-transport
- (71) Medium/heavy truck or bus not in-transport
- (76) Animal
- (77) Train
- (78) Trailer, disconnected in transport
- (79) Object fell from vehicle in-transport
- (88) Other nonfixed object (specify): _____

- (89) Unknown nonfixed object _____

- (98) Other event (specify): _____

- (99) Unknown event or object _____

VERRIDE/UNDERRIDE (THIS VEHICLE)

51. Front Override/Underride (this Vehicle) 0
52. Rear Override/Underride (this Vehicle) 0
 (0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride
- Override (see specific CDC)*
[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]
 (1) 1st CDC
 (2) 2nd CDC
 (3) Other not automated CDC (specify):

- Underride (see specific CDC)*
[Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49)]
 (4) 1st CDC
 (5) 2nd CDC
 (6) Other not automated CDC (specify):

- (7) Medium/heavy truck or bus override (of any configuration)
 (9) Unknown

HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V

Values: (000)-(359) Code actual value
 (996) Non-horizontal impact
 (997) Noncollision
 (998) Impact with object
 (999) Unknown

53. Heading Angle For This Vehicle 105
54. Heading Angle For Other Vehicle 359

RECONSTRUCTION DATA

55. Towed Trailing Unit 0
 (0) No towed unit
 (1) Yes—towed trailing unit
 (9) Unknown
56. Documentation of Trajectory Data for This Vehicle 1
 (0) No
 (1) Yes
57. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
 (0) Not collision (for highest delta V) with tree or pole
 (1) Not damaged
 (2) Cracked/sheared
 (3) Tilted <45 degrees
 (4) Tilted ≥45 degrees
 (5) Uprooted tree
 (6) Separated pole from base
 (7) Pole replaced
 (8) Other (specify):

 (9) Unknown

ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V

58. Basis for Total (Resultant) Delta V (highest) 02

(00) No vehicle inspection

Delta V Calculated

- (01) Reconstruction program-damage only routine
 (02) Reconstruction program-damage and trajectory routine
 (03) Missing vehicle algorithm

Delta V Not Calculated

- (04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

All vehicles within scope (CDC applicable) of reconstruction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.

- (05) Rollover
 (06) Other non-horizontal forces
 (07) Sideswipe type damage
 (08) Severe override
 (09) Yielding object
 (10) Overlapping damage
 (11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available, (specify):

(98) Other, (specify): _____

COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V

Highest

0 1 2

____ Nearest kmph (highest)

____ Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

60. Longitudinal Component of
Delta V

Highest

⊕
- 0 1 2

____ Nearest kmph (highest)

____ Nearest kmph (secondary)

(NOTE: 000 means greater than

-0.5 kmph and less than +0.5 kmph)

(±160) ±159.5 kmph and above

(999) Unknown

61. Lateral Component of Delta V

Highest

⊕
- 0 1 2

____ Nearest kmph (highest)

____ Nearest kmph (secondary)

(NOTE: 000 means greater than -0.5 kmph and
less than +0.5 kmph)

(±160) ±159.5 kmph and above

(999) Unknown

62. Energy Absorption

Highest

0 2 6 . 9 0 026,936 Nearest 100 joules (highest)

____ Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)

(9997) 999,650 joules or more

(9999) Unknown

63. Impact Speed

Highest

0 3 4

____ Nearest kmph (highest)

____ Nearest kmph (secondary)

(NOTE: 000 means

less than 0.5 kmph)

(160) 159.5 kmph and above

(998) Trajectory algorithm not run

(999) Unknown

DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program
Results (For Highest Delta V)

(0) No reconstruction

(1) Collision fits model — results appear
reasonable

(2) Collision fits model — results appear high

(3) Collision fits model — results appear low

(4) Borderline reconstruction — results appear
reasonable

OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed

Highest

0 1 414.2 Nearest kmph (highest)

____ Nearest kmph (secondary)

(NOTE: 000 means

less than 0.5 kmph)

(160) 159.5 kmph and above

(999) Unknown

ESTIMATED DELTA V	INSPECTION TYPE
66. Estimated Highest Delta V (Researcher Determined) <u>0</u> (0) Reconstruction Delta V coded <i>Estimated Delta V</i> (1) Less than 10 kmph (2) ≥ 10 kmph but < 25 kmph (3) ≥ 25 kmph but < 40 kmph (4) ≥ 40 kmph but < 55 kmph (5) ≥ 55 kmph <i>Other estimates of damage severity</i> (6) Minor (7) Moderate (8) Severe (9) Unknown	67. Type of Vehicle Inspection <u>3</u> (0) No inspection (1) Vehicle fully repaired-no damage evident (2) Partial inspection (specify): _____ (3) Complete inspection DELTA V EVENT NUMBER 68. Delta V Event Number <u>1</u> _____ Code the accident event sequence number that resulted in the Delta V that has been coded above for this vehicle (99) Unknown

*** IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67 = 0), ***

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

*** IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE ***

**THE EXTERIOR VEHICLE, INTERIOR VEHICLE,
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.**

EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM**

CRASHWORTHINESS DATA SYSTEM	
1. Primary Sampling Unit Number	3. Vehicle Number
2. Case Number - Stratum	

VEHICLE IDENTIFICATION

VIN 1MRBP99F5DY (Serial# Omitted) Model Year 83
 Vehicle Make (specify): Lincoln Continental Vehicle Model (specify): Mark VI
Manufactured 2/83

LOCATOR

Locate the end of the damage with respect to the vehicle's damaged center point or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
1	174.6cm (68.75") rear of right front axle	177.2cm (69.75") rear of RF axle	236.2cm (93.0") rear of RF axle

CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

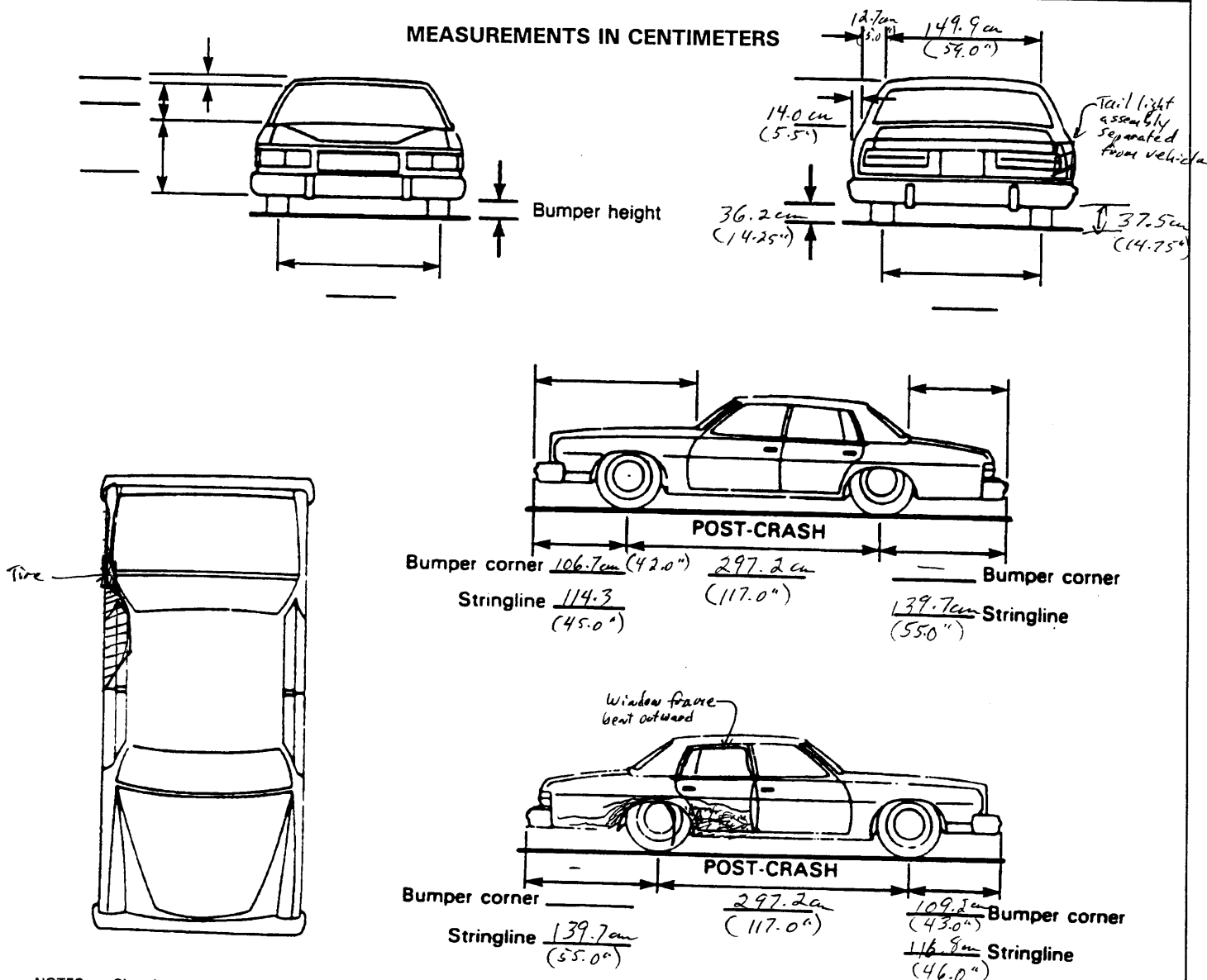
Use as many lines/columns as necessary to describe each damage profile.

[illegible]

VEHICLE DAMAGE SKETCH

TIRE—WHEEL DAMAGE a. Rotation physically restricted RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>2</u> (1) Yes (2) No (8) NA (9) Unk.		b. Tire deflated RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>2</u>		ORIGINAL SPECIFICATIONS Wheelbase <u>(117.3") 297.9</u> cm Overall Length <u>(219.1") 556.5</u> cm Maximum Width <u>(78.1") 198.4</u> cm Curb Weight <u>(4105 lb) 1862.0</u> kg Average Track <u>(62.1") 157.7</u> cm Front Overhang <u>(46.8") 118.9</u> cm Rear Overhang <u>(55.0") 139.7</u> cm Undeformed End Width <u> </u> cm Engine Size: cyl./displ. <u>8cyl/5.0</u> L		WHEEL STEER ANGLES (For locked front wheels or displaced rear axles only) RF ± <u> </u> ° LF ± <u> </u> ° RR ± <u> </u> ° LR ± <u> </u> ° Within ± 5 degrees	
TYPE OF TRANSMISSION <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic END SHIFT ≥ 10 CM <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				DRIVE WHEELS <input type="checkbox"/> FWD <input checked="" type="checkbox"/> RWD <input type="checkbox"/> 4WD Approximate Cargo Weight <u> </u> kg			

MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

CODES FOR OBJECT CONTACTED

(57) Fence

(58) Wall

- (58) Wall

- (59) Build

- (60) Ditch or culvert

- (61) Ground

- (62) Fire hydrant

- (63) Curb

- (64) Bridge

- (68) Other fixed object (specify):

- (69) Unknown fixed object

Collision with Nonfixed Object

- (70) Passenger car, light truck, van, or other vehicle not in-transport

- (71) Medium/heavy truck or bus not in-transport

- (72) Pedestrian

- (73) Cyclist or cycle

- (74) Other nonmotorist or conveyance

- (75) Vehicle occupant

- (76) Animal

- (77) Train

- (78) Trailer, disconnected in transport

- (79) Object fell from vehicle in-transport

- (88) Other nonfixed object (specify):

- (89) Unknown nonfixed object

- (98) Other event (specify):

- (99) Unknown event or object

[illegible]

COLLISION DEFORMATION CLASSIFICATION**HIGHEST DELTA "V"**

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>01</u>	6. <u>02</u>	7. <u>R</u>	8. <u>Z</u>	9. <u>W</u>	10. <u>W</u>	11. <u>03</u>

Second Highest Delta "V"

12. _____	13. _____	14. _____	15. _____	16. _____	17. _____	18. _____	19. _____
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₄</u>	<u>C₅</u>	<u>C₆</u>	22. <u>± D</u>
							+
							-

Second Highest Delta "V"

23. <u>L</u>	24. <u>C₁</u>	<u>C₂</u>	<u>C₃</u>	<u>C₄</u>	<u>C₅</u>	<u>C₆</u>	25. <u>± D</u>
							+
							-

26. Undeformed End Width
(Coded when highest severity impact is an end plane impact.) _____
 _____ Code to the nearest centimeter
 (250) 250 centimeters or more
 (998) No highest severity end plane impact
 (999) Unknown

27. Direct Damage Width
(For highest severity impact) _____
 _____ Code to the nearest centimeter
 (250) 250 centimeters or more
 (999) Unknown

28. Original Wheelbase
 _____ Code to the nearest centimeter
 (650) 650 centimeters or more
 (999) Unknown
 _____ inches X 2.54 = _____ centimeters

29. Original Average Track Width
 _____ Code to the nearest centimeter
 (185) 185 centimeters or more
 (999) Unknown
 _____ inches X 2.54 = _____ centimeters

FUEL SYSTEM

30. Are CDCs Documented
but Not Coded on The
Automated File? 0
(0) No
(1) Yes

31. Researcher's Assessment of Vehicle
Disposition 0
(0) Not towed due to vehicle damage
(1) Towed due to vehicle damage
(9) Unknown

32. Is This A Multi-Stage Manufactured Vehicle
And/Or A Certified Altered Vehicle? 0
(0) No post manufacturer modifications
(1) Yes - post manufacturer modifications
(specify): _____

(Include photograph of CERTIFICATION
PLACARD in case report)
(9) Unknown if vehicle is modified

FIRE OCCURRENCE

33. Fire Occurrence 0
(0) No fire

Yes, fire occurred
(1) Minor
(2) Major
(9) Unknown

34. Origin of Fire 0
(0) No fire
(1) Vehicle exterior (front, side, back, top)
(2) Exhaust system
(3) Fuel tank (and other fuel retention
system parts)
(4) Engine compartment
(5) Cargo/trunk compartment
(6) Instrument panel
(7) Passenger compartment area
(8) Other location (specify): _____
(9) Unknown

35. Location of Fuel Tank-1 Filler Cap 3

36. Location of Fuel Tank-2 Filler Cap 0
(0) No fuel tank
(1) On back plane
(2) Aft of center of the rear wheels (rear axle)
on left side plane
(3) Aft of center of the rear wheels (rear axle)
on right side plane
(4) Forward of center of the rear wheels (rear
axle) on left side plane
(5) Forward of center of the rear wheels (rear
axle) on right side plane
(6) Over the center of the rear wheels (rear
axle) on left side plane
(7) Over the center of the rear wheels (rear
axle) on right side plane
(8) Other (specify): _____
(9) Unknown

37. Type of Fuel Tank-1 1

38. Type of Fuel Tank-2 0
(0) No fuel tank (electrical vehicle)
(1) Metallic
(2) Non-metallic
(9) Unknown

39. Location of Fuel Tank-1 1

40. Location of Fuel Tank-2 0
(0) No fuel tank
(1) Aft of center of the rear wheels (rear axle)
centered
(2) Aft of center of the rear wheels (rear axle)
left side
(3) Aft of center of the rear wheels (rear axle)
right side
(4) Forward of center of the rear wheels (rear
axle) centered
(5) Forward of center of the rear wheels (rear
axle) left side
(6) Forward of center of the rear wheels (rear
axle) right side
(7) Over center of the rear wheels (rear axle)
(8) Other (specify): _____
(9) Unknown

41. Damage to Fuel Tank-1 1

42. Damage to Fuel Tank-2 0
(0) No fuel tank
(1) No damage to fuel tank
(2) Deformed, no seam failure
(3) Deformed, with a seam failure
(4) Punctured
(5) Lacerated (ripped)
(6) Abraded (scraped)
(7) Filler neck separation from the fuel tank
(8) Other damage (specify): _____
(9) Unknown

43. Leakage Location of Fuel System-1

1

44. Leakage Location of Fuel System-2

0

(0) No fuel tank

(1) No fuel leakage

Primary Area Of Leakage

(2) Tank

(3) Filler neck

(4) Cap

(5) Lines/pump/filter

(6) Vent/emission recovery

(8) Other (specify): _____

(9) Unknown

45. Fuel Type-1

01

46. Fuel Type-2

00*Single Fuel Type*

(00) No fuel tank

(01) Gasoline

(02) Diesel

(03) CNG (Compressed Natural Gas)

(04) LPG (Liquid Petroleum Gas) also
known as Propane

(05) LNG (Liquid Natural Gas)

(06) Methanol (M100 or M85)

(07) Ethanol (E100 or E85)

(08) Other (Hydrogen or others) (specify):
_____*Electric Powered or Electric/Solar
Powered Vehicles*

(10) Lead Acid Battery

(11) Nickel-Iron Battery

(12) Nickel-Cadmium Battery

(13) Sodium Metal Chloride Battery

(14) Sodium Sulfur Battery

(18) Other (Specify): _____

(98) Other Hybrid (specify):

(99) Unknown fuel type

47. Is This Vehicle Equipped With More Than
Two Fuel Tanks?0

(0) No (one or two tanks only)

Yes - More Than Two Tanks(1) Yes -- no damage to any tank or filler
cap and no fuel system leakage(2) Yes -- no damage to any tank or filler
cap but there is fuel system leakage
(specify leakage location): _____(3) Yes -- damage to an additional tank or
filler cap and there is fuel system leakage
(specify the following):
Type of tank _____
Tank location _____
Filler cap location _____
Tank damage _____
Location of leakage _____
Type of fuel _____

(9) Unknown if more than two tanks

COMMENTS

*** STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED ***

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



INTERIOR VEHICLE FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum 96-07

3. Vehicle Number 02

INTEGRITY

4. Passenger Compartment Integrity 00

(00) No integrity loss

Yes, Integrity Was Lost Through

(01) Windshield

(02) Door (side)

(03) Door/hatch (back door)

(04) Roof

(05) Roof glass

(06) Side window

(07) Rear window (backlight)

(08) Roof and roof glass

(09) Windshield and door (side)

(10) Windshield and roof

(11) Side and rear window (side window and backlight)

(12) Windshield and side window

(13) Door and side window

(98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF / 6. RF / 7. LR / 8. RR / 9. TG/H

(0) No door/gate/hatch

(1) Door/gate/hatch remained closed and operational

(2) Door/gate/hatch came open during collision

(3) Door/gate/hatch jammed shut

(8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 ≠ 2, Then code 0

10. LF / 11. RF / 12. LR / 13. RR / 14. TG/H

(0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

(1) Door operational (no damage)

(2) Latch/striker failure due to damage

(3) Hinge failure due to damage

(4) Door structure failure due to damage

(5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage

(6) Latch/striker and hinge failure due to damage

(8) Other failure (specify):

(9) Unknown

GLAZING

Type of Window/Windshield Glazing

15. WS / 16. LF / 17. RF / 18. LR / 19. RR

20. BL / 21. Roof / 22. Other

(0) No glazing

(1) AS-1 — Laminated

(2) AS-2 — Tempered

(3) AS-3 — Tempered-tinted (original)

(4) AS-2 — Tempered-with after market tint

(5) AS-3 — Tempered-tinted (with additional after market tint)

(6) AS-14 — Glass/Plastic

(7) Glazing removed prior to accident

(8) Other (specify):

After market tint applied

(9) Unknown

Window Precrash Glazing Status

23. WS / 24. LF / 25. RF / 26. LR / 27. RR

28. BL / 29. Roof / 30. Other

(0) No glazing

(1) Fixed

(2) Closed

(3) Partially opened

(4) Fully opened

(7) Glazing removed prior to accident

(9) Unknown

Glazing Damage from Impact Forces

31. WS / 32. LF / 33. RF / 34. LR / 35. RR

36. BL / 37. Roof / 38. Other

(0) No glazing

(1) No glazing damage from impact forces

(2) Glazing in place and cracked from impact forces

(3) Glazing in place and holed from impact forces

(4) Glazing out-of-place (cracked or not) and not holed from impact forces

(5) Glazing out-of-place and holed from impact forces

(6) Glazing disintegrated from impact forces

(7) Glazing removed prior to accident

(9) Unknown if damaged

Glazing Damage from Occupant Contact

39. WS / 40. LF / 41. RF / 42. LR / 43. RR

44. BL / 45. Roof / 46. Other

(0) No glazing

(1) No occupant contact to glazing

(2) Glazing contacted by occupant but no glazing damage

(3) Glazing in place and cracked by occupant contact

(4) Glazing in place and holed by occupant contact

(5) Glazing out-of-place (cracked or not) by occupant

contact and not holed by occupant contact

(6) Glazing out-of-place by occupant contact and holed by occupant contact

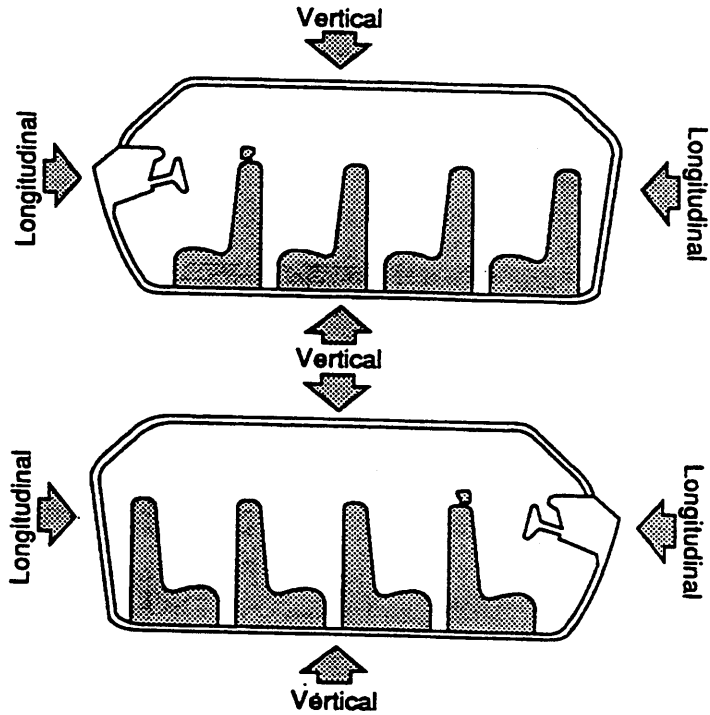
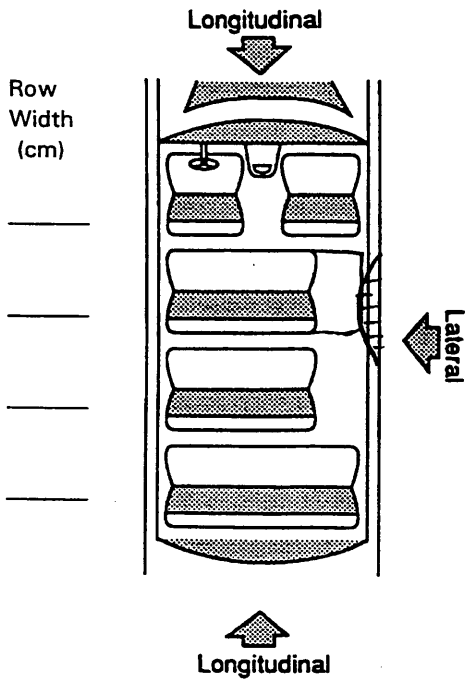
(7) Glazing removed prior to accident

(8) Glazing disintegrated by occupant contact

(9) Unknown if contacted by occupant

INTRUSION WORKSHEET

NOTE: SKETCH INTRUDED AREAS



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)			DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	INTRUSION	
23	Door panel	66.0cm (26.0")	64.1cm (25.25")	= 1.9cm (0.75")	Lateral
23	C-pillar (upper)	70.5 (27.75")	76.2cm (30.0")	= 5.7cm (2.25")	Lateral
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	

OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

INTRUDING COMPONENT

Interior Components

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify): _____

Exterior Components

- (30) Hood
- (31) Outside surface of this vehicle (specify): _____
- (32) Other exterior object in the environment (specify): _____
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): _____
- (99) Unknown

LOCATION OF INTRUSION

Front Seat

- (11) Left
- (12) Middle
- (13) Right

Second Seat

- (21) Left
- (22) Middle
- (23) Right

Third Seat

- (31) Left
- (32) Middle
- (33) Right

Fourth Seat

- (41) Left
- (42) Middle
- (43) Right

- (97) Catastrophic
- (98) Other enclosed area (specify) _____

(99) Unknown

MAGNITUDE OF INTRUSION

- (1) ≥ 3 centimeters but < 8 centimeters
- (2) ≥ 8 centimeters but < 15 centimeters
- (3) ≥ 15 centimeters but < 30 centimeters
- (4) ≥ 30 centimeters but < 46 centimeters
- (5) ≥ 46 centimeters but < 61 centimeters
- (6) ≥ 61 centimeters
- (7) Catastrophic
- (9) Unknown

DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
------------------	---	--------------	---	-------------

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

	—		=	
--	---	--	---	--

STEERING COLUMN

INSTRUMENT PANEL

87. Steering Column Type 2

- (1) Fixed column
 (2) Tilt column
 (3) Telescoping column
 (4) Tilt and telescoping column
 (8) Other column type (specify): _____
 (9) Unknown

88. Tilt Steering Column Adjustment 2

- (0) No tilt steering column
 (1) Full up
 (2) Between full up and center
 (3) Center
 (4) Between center and full down
 (5) Full down
 (9) Unknown

89. Telescoping Steering Column Adjustment 0

- (0) No telescoping steering column
 (1) Full back
 (2) Between full back and midpoint
 (3) Midpoint
 (4) Between midpoint and full forward
 (5) Full forward
 (9) Unknown

90. Steering Rim/Spoke Deformation 00

- Code actual measured
 deformation to the nearest centimeter
 (00) No steering rim deformation
 (01-14) Actual measured value in centimeters
 (15) 15 centimeters or more
 (98) Observed deformation cannot be measured
 (99) Unknown

91. Location of Steering Rim/Spoke Deformation 00

- (00) No steering rim deformation

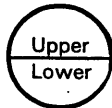
Quarter Sections

- (01) Section A
 (02) Section B
 (03) Section C
 (04) Section D



Half Sections

- (05) Upper half of rim/spoke
 (06) Lower half of rim/spoke
 (07) Left half of rim/spoke
 (08) Right half of rim/spoke



- (09) Complete steering wheel collapse
 (10) Undetermined location
 (99) Unknown

92. Odometer Reading 2 6 3,000

_____ kilometers
 Code to the nearest 1,000 kilometers
 (000) No odometer
 (001) Less than 1,500 kilometers
 (500) 499,500 kilometers or more
 (999) Unknown
163,208 miles X 1.6093 = 262,651 kilometers

Source: _____

93. Instrument Panel Damage from Occupant Contact? 0

- (0) No
 (1) Yes
 (9) Unknown

94. Type of Knee Bolster Covering 0

- (0) No knee bolster
 (1) Padded
 (2) Rigid plastic
 (8) Other (specify): _____
 (9) Unknown

95. Knee Bolsters Deformed from Occupant Contact? 0

- (0) No knee bolster
 (1) No deformation
 (2) Yes - deformation
 (9) Unknown

96. Did Glove Compartment Door Open During Collision(s)? 0

- (0) No glove compartment door
 (1) No - door did not open
 (2) Yes - door opened
 (9) Unknown

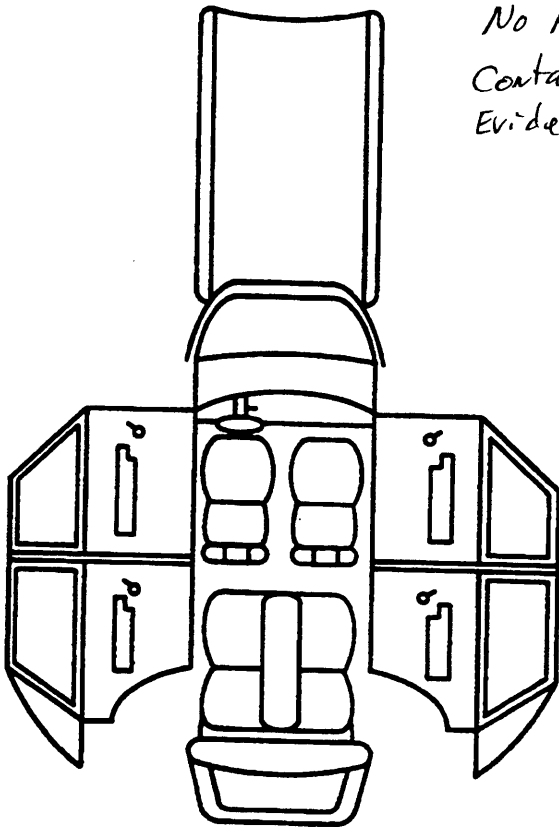
97. Adaptive (Assistive) Driving Equipment 0

- (0) No adaptive driving equipment
 (1) Adaptive driving equipment installed (Check all that apply.)
☐ Hand controls for braking/acceleration
☐ Steering control devices (attached to OEM steering wheel)
☐ Steering knob attached to steering wheel
☐ Low effort power steering (unit or device)
☐ Replacement steering wheel (i.e., reduced diameter)
☐ Joy-stick steering controls
☐ Wheelchair tie-downs
☐ Modification to seat belts (specify): _____
☐ Additional or relocated switches (specify): _____
☐ Raised roof
☐ Wall-mounted head rest (used behind wheelchair)
☐ Other adaptive device (specify): _____

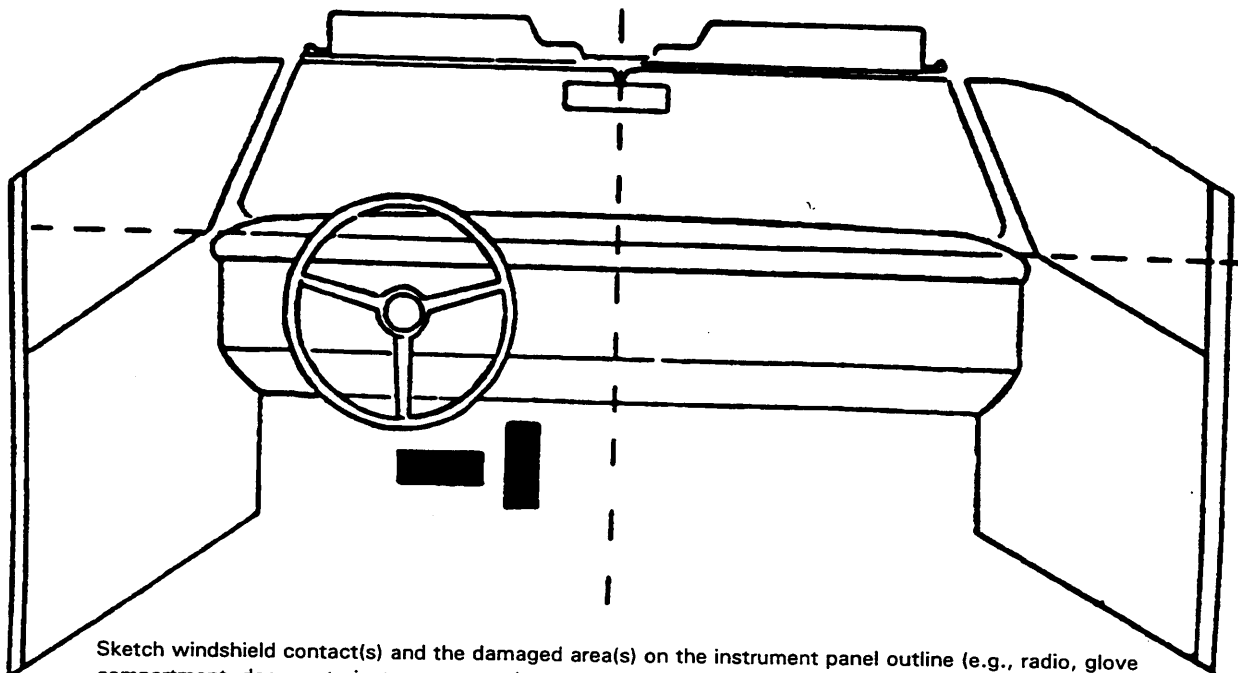
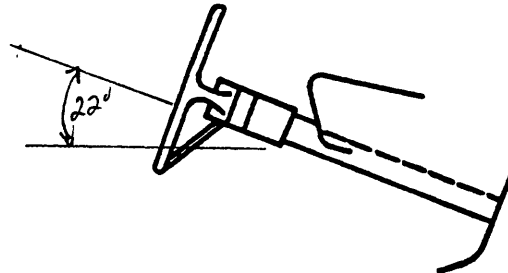
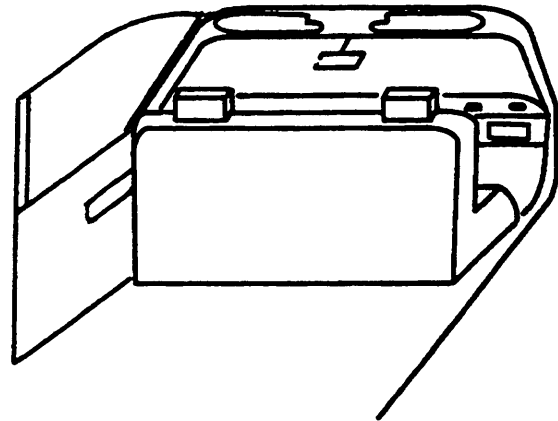
(9) Unknown

VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



*No Apparent
Contact
Evidence*



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A					
B					
C					
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

FRONT

- (001) Windshield
 (002) Mirror
 (003) Sunvisor
 (004) Steering wheel rim
 (005) Steering wheel hub/spoke
 (006) Steering wheel (combination of codes 004 and 005)
 (007) Steering column, transmission selector lever, other attachment
 (008) Cellular telephone or CB radio
 (009) Add on equipment (e.g., tape deck, air conditioner)
 (010) Left instrument panel and below
 (011) Center instrument panel and below
 (012) Right instrument panel and below
 (013) Glove compartment door
 (014) Knee bolster
 (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
 (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
 (017) Windshield reinforced by exterior object, (specify):
 (019) Other front object (specify):

CODES FOR INTERIOR COMPONENTS

LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
 (052) Left side hardware or armrest
 (053) Left A (A1/A2)-pillar
 (054) Left B-pillar
 (055) Other left pillar (specify):
 (056) Left side window glass
 (057) Left side window frame
 (058) Left side window sill
 (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
 (060) Other left side object (specify):

RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests
 (102) Right side hardware or armrest
 (103) Right A (A1/A2)-pillar
 (104) Right B-pillar
 (105) Other right pillar (specify):
 (106) Right side window glass
 (107) Right side window frame
 (108) Right side window sill
 (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
 (110) Other right side object (specify):

INTERIOR

- (151) Seat, back support
 (152) Belt restraint webbing/buckle
 (153) Belt restraint B-pillar or door frame attachment point
 (154) Other restraint system component (specify):
 (155) Head restraint system
 (160) Other occupants (specify):
 (161) Interior loose objects
 (162) Child safety seat (specify):
 (163) Other interior object (specify):

AIR BAG

- (170) Air bag-driver side
 (175) Air bag compartment cover-driver side
 (180) Air bag-passenger side
 (185) Air bag compartment cover-passenger side
 (190) Other air bag (specify):
 (195) Other air bag compartment cover (specify):

ROOF

- (201) Front header
 (202) Rear header
 (203) Roof left side rail
 (204) Roof right side rail
 (205) Roof or convertible top

FLOOR

- (251) Floor (including toe pan)
 (252) Floor or console mounted transmission lever, including console
 (253) Parking brake handle
 (254) Foot controls including parking brake

REAR

- (301) Backlight (rear window)
 (302) Backlight storage rack, door, etc.
 (303) Other rear object (specify):

ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
 (402) Steering control devices (attached to OEM steering wheel)
 (403) Steering knob attached to steering wheel
 (405) Replacement steering wheel (i.e., reduced diameter)
 (406) Joy stick steering controls
 (407) Wheelchair tie-downs
 (408) Modification to seat belts, (specify):
 (409) Additional or relocated switches, (specify):
 (410) Raised roof
 (411) Wall mounted head rest (used behind wheel chair)
 (412) Other adaptive device (specify):

CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain
 (2) Probable
 (3) Possible
 (9) Unknown

MANUAL RESTRAINTS

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a child safety seat is present, encode the data on the back of this page 11.

If the vehicle has automatic restraints available, encode the appropriate data on page 6.

		Left	Center	Right
FIRST	A-Availability	4	3	4
	B-Evidence of usage	04	00	04
	C-Used in this crash?	00	00	00
	D-Proper Use	9	0	0
	E-Failure Modes	9	0	0
	F-Anchorage Adjustment	1	0	1
SECOND	A-Availability	3	3	3
	B-Evidence of usage	00	00	08
	C-Used in this crash?	00	00	00
	D-Proper Use	0	0	0
	E-Failure Modes	0	0	0
	F-Anchorage Adjustment	0	0	0
OTHER	A-Availability	/	/	/
	B-Evidence of usage	/	/	/
	C-Used in this crash?	/	/	/
	D-Proper Use	/	/	/
	E-Failure Modes	/	/	/
	F-Anchorage Adjustment	/	/	/

A-Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): _____
- (9) Unknown

B/C-Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify): _____

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify): _____
- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify): _____
- (99) Unknown if belt used

D-Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____
- (8) Other improper use of manual belt system (specify): _____
- (9) Unknown

E-Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): _____
- (6) Broken retractor
- (7) Combination of above (specify): _____
- (8) Other manual belt failure (specify): _____
- (9) Unknown

F-Shoulder Belt Upper Anchorage Adjustment

- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

Adjustable shoulder Belt Upper Anchorage

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

AUTOMATIC RESTRAINTS

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

AIR BAGS

		Frontal Air Bags--Left Front	Frontal Air Bags--Right Front	Other Air Bag
F I R S T	Availability/Function	0	0	0
	Deployment	/	/	/
	Failure	/	/	/

Air Bag System Availability/Function

- (0) Not equipped/not available
(1) Air bag

Non-functional

- (2) Air bag disconnected (specify):

(3) Air bag not reinstalled
(9) Unknown

**Air Bag System Deployment
(This Occupant Position)**

- (0) Not equipped/not available
(1) Deployed during accident (as a result of impact)
(2) Deployed inadvertently just prior to accident
(3) Deployed, accident sequence undetermined
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
(5) Unknown if deployed
(7) Nondeployed
(9) Unknown

**Are There Indications of Air Bag
System Failure? (This Occupant Position)**

- (0) Not equipped/not available
(1) No
(2) Yes (specify):

(9) Unknown

AUTOMATIC BELTS

		Left	Right
F I R S T	A-Availability/Function	0	0
	B-Use	/	/
	C-Type	/	/
	D-Proper Use	/	/
	E-Failure Modes	/	/

**A-Automatic (Passive) Belt System
Availability/Function**

- (0) Not equipped/not available
(1) 2 point automatic belts
(2) 3 point automatic belts
(3) Automatic belts - type unknown

Non-functional

- (4) Automatic belts destroyed or rendered inoperative
(9) Unknown

B-Automatic (Passive) Belt System Use

- (0) Not equipped/not available/destroyed or rendered inoperative
(1) Automatic belt in use
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)
(3) Automatic belt use unknown
(9) Unknown

C-Automatic (Passive) Belt System Type

- (0) Not equipped/not available
(1) Non-motorized system
(2) Motorized system
(9) Unknown

**D-Proper Use of Automatic (Passive) Belt
System**

- (0) Not equipped/not available/not used
(1) Automatic belt used properly
(2) Automatic belt used properly with child safety seat

Automatic Belt Used Improperly

- (3) Automatic shoulder belt worn under arm
(4) Automatic shoulder belt worn behind back
(5) Automatic belt worn around more than one person
(6) Lap portion of automatic belt worn on abdomen
(7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify):

- (8) Other improper use of automatic belt system (specify):

(9) Unknown

**E-Automatic (Passive) Belt Failure Modes
During Accident**

- (0) Not equipped/not available/not in use
(1) No automatic belt failure(s)
(2) Torn webbing (stretched webbing not included)
(3) Broken buckle or latchplate
(4) Upper anchorage separated
(5) Other anchorage separated (specify):

(6) Broken retractor
(7) Combination of above (specify):
(8) Other automatic belt failure (specify):

(9) Unknown

FIRST SEAT FRONTAL AIR BAGS

NOTES: Encode the applicable data *for the driver and first seat passenger* in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
A-Type of air bag?	0	0
B-Flaps open at tear points?	/	/
C-Flaps damaged?	/	/
D-Air bag damaged?	/	/
E-Source of air bag damage	/	/
F-Air bag tethered?	/	/
G-Air bag have vent ports?	/	/
H-Other occupant contact air bag?	/	/
I-Occupant wearing eyewear?	/	/

A-Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

B-Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

C-Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

D-Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify):

- (95) Damaged, details unknown
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

E-Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify):
- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

F-Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps):
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

G-Did The Air Bag Have Vent Ports?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports):
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

H-Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

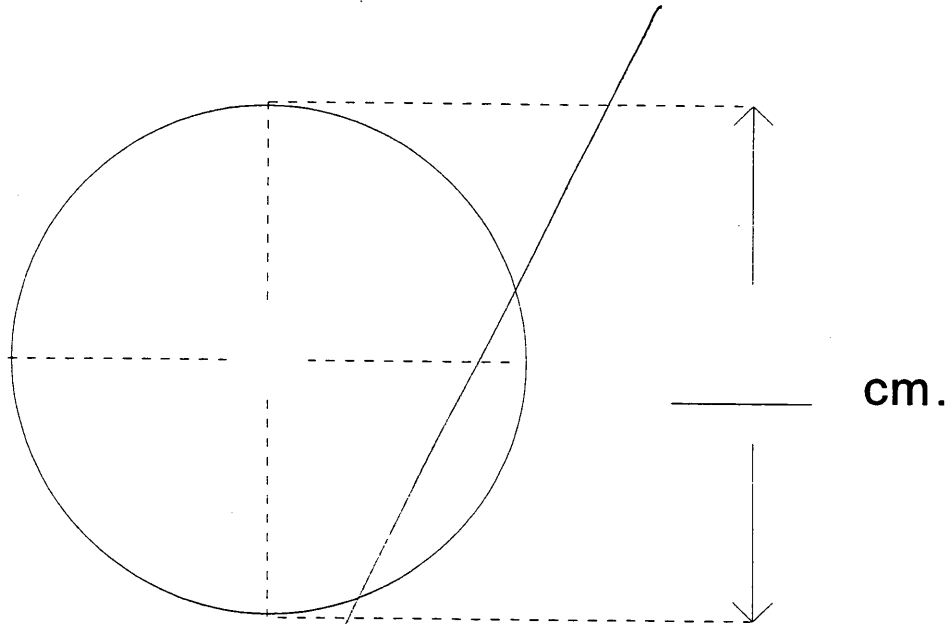
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

I-Was This Occupant Wearing Eye-wear?

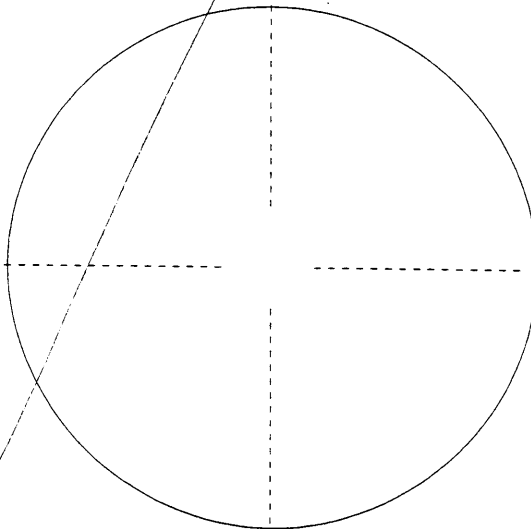
- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Front)



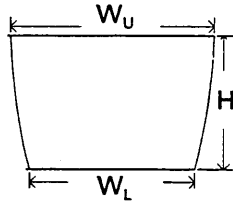
2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)



DRIVER AIR BAG SKETCHES (Cont'd)

3. DRIVER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width (W_U) _____ width (W_L) _____
 height (H) _____

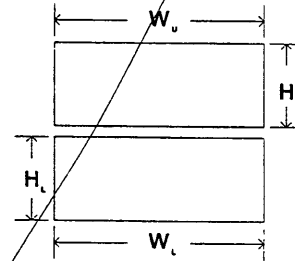


4. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

b. Lower Flap

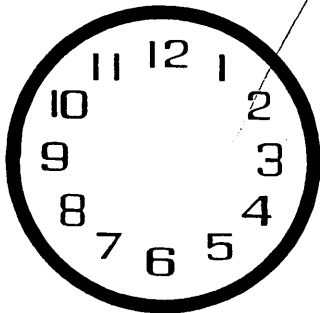
width (W_U) _____ width (W_L) _____
 height (H_U) _____ height (H_L) _____

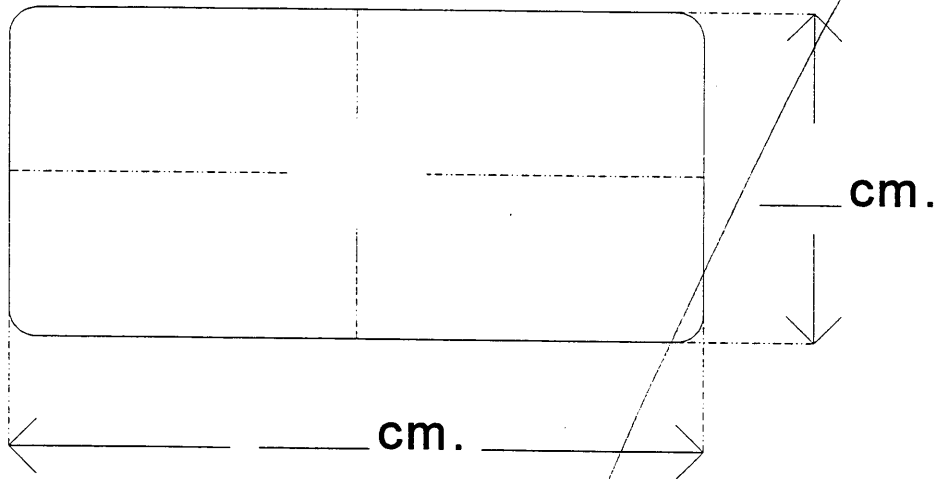
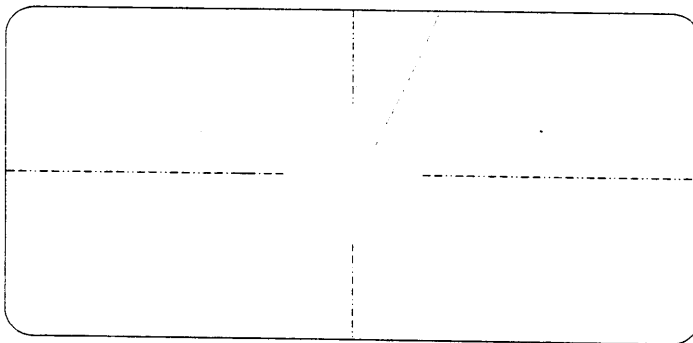


5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

7. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS



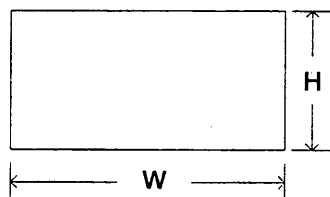
PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES**1. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Front)****2. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Back)**

PASSENGER AIR BAG SKETCHES (Cont'd)

3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width (W) _____

height (H) _____



4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

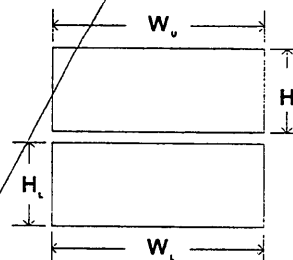
b. Lower Flap

width (W_U) _____

width (W_L) _____

height (H_U) _____

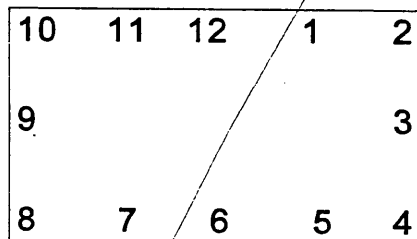
height (H_L) _____



5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS



"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Front)

2. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)

"OTHER" AIR BAG SKETCHES (Cont'd)

3. SKETCH AIR BAG MODULE FLAP AND SIZE OR OPENING FOR AIRBAG

4. SKETCH AIR BAG VENT PORTS

HEAD RESTRAINTS/SEAT EVALUATION

NOTES: Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
FIRST	A-Head Restraint Type/Damage	3	0	3
	B-Seat Type	06	06	06
	C-Seat Orientation	1	1	1
	D-Seat Track Position	5	5	5
	E-Seat Back Incline Pre/Post Impact	23	23	23
	F-Seat Performance	1	1	1
SECOND	A-Head Restraint Type/Damage	0	0	0
	B-Seat Type	03	03	03
	C-Seat Orientation	1	1	1
	D-Seat Track Position	1	1	1
	E-Seat Back Incline Pre/Post Impact	01	01	01
	F-Seat Performance	1	1	1
THIRD	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			
OTHER	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			

DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)

HEAD RESTRAINTS/SEAT EVALUATION

A-Head Restraint Type/Damage by Occupant at This Occupant Position

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other
Specify): _____
- (9) Unknown

B-Seat Type (this Occupant Position)

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Box mounted seat (i.e., van type)
- (10) Other seat type (specify): _____
- (99) Unknown

C-Seat Orientation (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): _____
- (9) Unknown

D-Seat Track Adjusted Position Prior To Impact

- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track

Adjustable Seat Track

- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

E-Seat Back Incline Prior and Post Impact

- (00) Occupant not seated or no seat
- (01) Not adjustable

Upright prior to impact

- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position

Slightly reclined prior to impact

- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position

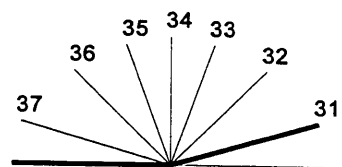
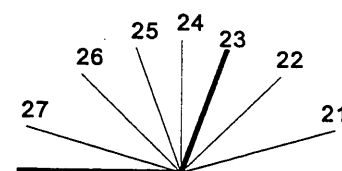
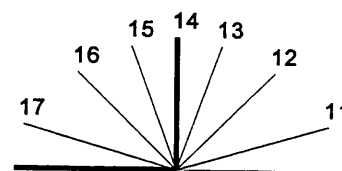
Completely reclined prior to impact

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position

- (99) Unknown

F-Seat Performance (this Occupant Position)

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): _____
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): _____
- (7) Combination of above (specify): _____
- (8) Other (specify): _____
- (9) Unknown

Coding diagrams for *Seat Back Incline Position Prior and Post Impact*

CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify): _____
- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify): _____
- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify): _____
- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify): _____
- (29) Unknown orientation

(99) Unknown if child safety seat used

3. Child Safety Seat Harness Usage

4. Child Safety Seat Shield Usage

5. Child Safety Seat Tether Usage

Note: Options Below Are Used for Variables 3-5.

(00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

6. Child Safety Seat Make/Model

(Specify make/model and occupant number)

EJECTION/ENTRAPMENT DATA

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

EJECTION No [☒] Yes [☐]

Describe indications of ejection and body parts involved in partial ejection(s):

Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

Ejection

- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, Unknown degree
- (9) Unknown

Ejection Area

- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear

(7) Roof

- (8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown

Ejection Medium

- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify):

(5) Integral structure

- (8) Other medium (specify):

(9) Unknown

Medium Status (Immediately Prior to Impact)

- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

ENTRAPMENT No [☒] Yes [☐]

Describe entrapment mechanism:

Component(s):

(Note on vehicle interior sketch)



OCCUPANT ASSESSMENT FORM

NATIONAL ACCIDENT SAMPLING SYSTEM
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number
2. Case Number - Stratum CA 96-07
3. Vehicle Number 02
4. Occupant Number 01

OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 60
Code actual age at time of accident.
(00) Less than one year old (specify by month):

(97) 97 years and older
(99) Unknown
6. Occupant's Sex 1
(1) Male
(2) Female-not reported pregnant
(3) Female-pregnant-1st trimester(1st-3rd month)
(4) Female-pregnant-2nd trimester(4th-6th month)
(5) Female-pregnant-3rd trimester(7th-9th month)
(6) Female-pregnant-term unknown
(9) Unknown
7. Occupant's Height 191
Code actual height to the nearest
centimeter.
(999) Unknown

____ inches X 2.54 = ____ centimeters
8. Occupant's Weight 116
Code actual weight to the nearest
kilogram.
(999) Unknown

____ pounds X .4536 = ____ kilograms
9. Occupant's Role 1
(1) Driver
(2) Passenger
(9) Unknown

OCCUPANT'S SEATING

10. Occupant's Seat Position 14
Front Seat
(11) Left side
(12) Middle
(13) Right side
(14) Other (specify):
(15) On or in the lap of another occupant

Second Seat
(21) Left side
(22) Middle
(23) Right side
(24) Other (specify):
(25) On or in the lap of another occupant

Third Seat
(31) Left side
(32) Middle
(33) Right side
(34) Other (specify):
(35) On or in the lap of another occupant

Fourth Seat
(41) Left side
(42) Middle
(43) Right side
(44) Other (specify):
(45) On or in the lap of another occupant

(97) In or on unenclosed area
(98) Other seat (specify):
(99) Unknown
11. Occupant's Posture 0
(0) Normal posture

Abnormal posture
(1) Kneeling or standing on seat
(2) Lying on or across seat
(3) Kneeling, standing or sitting in front of seat
(4) Sitting sideways or turned to talk with
another occupant or to look out a rear
window
(5) Sitting on a console
(6) Lying back in a reclined seat position
(7) Bracing with feet or hands on a surface in
front of seat
(8) Other abnormal posture (specify):
(9) Unknown

EJECTION/ENTRAPMENT

12. Ejection 0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area 0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)
(specify): _____
- (9) Unknown

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): _____
- (5) Integral structure
- (8) Other medium (specify): _____
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 0

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.
(specify): _____
- (9) Unknown

17. Occupant Mobility 0

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons
(specify): _____
- (9) Unknown

BELT SYSTEM FUNCTION

<p>18. Manual (Active) Belt System Availability 4</p> <p>(0) None available</p> <p>(1) Belt removed/destroyed</p> <p>(2) Shoulder belt</p> <p>(3) Lap belt</p> <p>(4) Lap and shoulder belt</p> <p>(5) Belt available—type unknown</p> <p><i>Integral Belt Partially Destroyed</i></p> <p>(6) Shoulder belt (lap belt destroyed/removed)</p> <p>(7) Lap belt (shoulder belt destroyed/removed)</p> <p>(8) Other belt (specify): _____</p> <p>(9) Unknown</p>	<p>22. Manual Shoulder Belt Upper Anchorage Adjustment +</p> <p>(0) No manual shoulder belt</p> <p>(1) No upper anchorage adjustment for manual shoulder belt</p> <p><i>Adjustable shoulder Belt Upper Anchorage</i></p> <p>(2) In full up position</p> <p>(3) In mid position</p> <p>(4) In full down position</p> <p>(5) Position unknown</p> <p>(9) Unknown if position has adjustable upper anchorage adjustment</p>
<p>19. Manual (Active) Belt System Use 04</p> <p>(00) None used, not available, or belt removed/destroyed</p> <p>(01) Inoperative (specify): _____</p> <p>(02) Shoulder belt</p> <p>(03) Lap belt</p> <p>(04) Lap and shoulder belt</p> <p>(05) Belt used—type unknown</p> <p>(08) Other belt used (specify): _____</p> <p>(12) Shoulder belt used with child safety seat</p> <p>(13) Lap belt used with child safety seat</p> <p>(14) Lap and shoulder belt used with child safety seat</p> <p>(15) Belt used with child safety seat—type unknown</p> <p>(18) Other belt used with child safety seat (specify): _____</p> <p>(99) Unknown if belt used</p>	<p>23. Automatic (Passive) Belt System Availability/Function 0</p> <p>(0) Not equipped/not available</p> <p>(1) 2 point automatic belts</p> <p>(2) 3 point automatic belts</p> <p>(3) Automatic belts - type unknown</p> <p><i>Non-functional</i></p> <p>(4) Automatic belts destroyed or rendered inoperative</p> <p>(9) Unknown</p> <p>24. Automatic (Passive) Belt System Use 0</p> <p>(0) Not equipped/not available/destroyed or rendered inoperative</p> <p>(1) Automatic belt in use</p> <p>(2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____</p> <p>(3) Automatic belt use unknown</p> <p>(9) Unknown</p>
<p>20. Proper Use of Manual (Active) Belts +</p> <p>(0) None used or not available</p> <p>(1) Belt used properly</p> <p>(2) Belt used properly with child safety seat</p> <p><i>Belt Used Improperly</i></p> <p>(3) Shoulder belt worn under arm</p> <p>(4) Shoulder belt worn behind back or seat</p> <p>(5) Belt worn around more than one person</p> <p>(6) Lap belt worn on abdomen</p> <p>(7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____</p> <p>(8) Other improper use of manual belt system (specify): _____</p> <p>(9) Unknown</p>	<p>25. Automatic (Passive) Belt System Type 0</p> <p>(0) Not equipped/not available</p> <p>(1) Non-motorized system</p> <p>(2) Motorized system</p> <p>(9) Unknown</p> <p>26. Proper Use of Automatic (Passive) Belt System 0</p> <p>(0) Not equipped/not available/not used</p> <p>(1) Automatic belt used properly</p> <p>(2) Automatic belt used properly with child safety seat</p> <p><i>Automatic Belt Used Improperly</i></p> <p>(3) Automatic shoulder belt worn under arm</p> <p>(4) Automatic shoulder belt worn behind back</p> <p>(5) Automatic belt worn around more than one person</p> <p>(6) Lap portion of automatic belt worn on abdomen</p> <p>(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify): _____</p> <p>(8) Other improper use of automatic belt system (specify): _____</p> <p>(9) Unknown</p>
<p>21. Manual (Active) Belt Failure Modes During Accident 1</p> <p>(0) No manual belt used or not available</p> <p>(1) No manual belt failure(s)</p> <p>(2) Torn webbing (stretched webbing not included)</p> <p>(3) Broken buckle or latchplate</p> <p>(4) Upper anchorage separated</p> <p>(5) Other anchorage separated (specify): _____</p> <p>(6) Broken retractor</p> <p>(7) Combination of above (specify): _____</p> <p>(8) Other manual belt failure (specify): _____</p> <p>(9) Unknown</p>	<p>27. Automatic (Passive) Belt Failure Modes During Accident 0</p> <p>(0) Not equipped/not available/not in use</p> <p>(1) No automatic belt failure(s)</p> <p>(2) Torn webbing (stretched webbing not included)</p> <p>(3) Broken buckle or latchplate</p> <p>(4) Upper anchorage separated</p> <p>(5) Other anchorage separated (specify): _____</p> <p>(6) Broken retractor</p> <p>(7) Combination of above (specify): _____</p> <p>(8) Other automatic belt failure (specify): _____</p> <p>(9) Unknown</p>

POLICE REPORTED RESTRAINT USE

28. Police Reported Belt Use

- (0) None used
 (1) Police did not indicate belt use
 (2) Shoulder belt
 (3) Lap belt
 (4) Lap and shoulder belt
 (5) Belt used, type not specified
 (6) Child safety seat
 (7) Automatic belt
 (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function

- (0) No air bag available
 (1) Police did not indicate air bag availability/function
 (2) Deployed
 (3) Not deployed
 (4) Unknown if deployed
 (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- [] Vehicle inspection
 [] Official injury data
 [X] Driver/occupant interview
 [] Other (specify):

[] Unknown if belt used

AIR BAG SYSTEM FUNCTION

30. Frontal Air Bag System

- Availability/Function
 (This Occupant Position)
 (0) Not equipped/not available
 (1) Air bag

Non-functional

(2) Air bag disconnected (specify):

(3) Air bag not reinstalled

(9) Unknown

31. Frontal Air Bag System Deployment
(This Occupant Position)

- (0) Not equipped/not available
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown

32. Other Than First Seat Frontal Air Bag
Availability/Function
(This Occupant Position)

- (0) Not equipped/not available
 (1) Air bag

Non-functional

(2) Air bag disconnected (specify):

(3) Air bag not reinstalled

(9) Unknown

Specify type of "other" air bag present:

33. Air Bag(s) Deployment, Other Than First
Seat Frontal (This Occupant Position)

- (0) Not equipped with an "other" air bag
 (1) Deployed during accident (as a result of impact)
 (2) Deployed inadvertently just prior to accident
 (3) Deployed, details unknown
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
 (5) Unknown if deployed
 (7) Nondeployed
 (9) Unknown

34. Are There Indications of Air Bag System
Failure?

- (This Occupant Position)
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify):

(9) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 0

- (0) Not equipped/not available
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)
(3) One previous accident with deployment
(4) More than one previous accident with at least one deployment
(8) Previous accidents, unknown deployment status
(9) Unknown

36. Type of Air Bag 0

- (0) Not equipped/not available
(1) Original manufacturer installed system
(2) Retrofitted air bag
(3) Replacement air bag
(8) Unknown type of air bag
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 0

- (0) Not equipped/not available
(1) No prior maintenance
(2) Yes, prior maintenance (specify):
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 00

- (00) Not equipped/not available
Code the accident event sequence number that initiated the air bag deployment
(96) Deployed, unknown event
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

39. CDC For Air Bag Deployment Impact 0

- (0) Not equipped/not available
(1) Highest delta V
(2) Second highest delta V
(3) Other non-coded delta V (specify):

- (6) Deployed, unknown event
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact +

(_000) Not equipped/not available

Code the value of the delta V for the impact that initiated the air bag deployment

(_996) Deployment, unknown longitudinal Delta V

(_997) Not deployed

(_998) Unknown if deployed

(_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 0

- (0) Not equipped/not available
(1) No
(2) Yes
(3) Deployed, unknown if flap(s) opened at designated tear points
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 0

- (0) Not equipped/not available
(1) No
(2) Yes (specify):
(3) Deployed, unknown if air bag module cover flap(s) damaged
(7) Not deployed
(8) Unknown if deployed
(9) Unknown

43. Was There Damage To The Air Bag? 00

- (00) Not equipped/not available
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured
(03) Cut
(04) Torn
(05) Holed
(06) Burned
(07) Abraded
(88) Other damage (specify):

- (95) Damaged, details unknown
(96) Deployed, unknown if damaged
(97) Not deployed
(98) Unknown if deployed
(99) Unknown

FIRST SEAT FRONTAL AIR BAG SYSTEM
EVALUATION *continued*

HEAD RESTRAINT AND SEAT EVALUATION

44. Source of Air Bag Damage 00
 (00) Not equipped/not available
 (01) Not damaged
 (02) Object worn by occupant, (specify):
 (03) Object carried by occupant, (specify):
 (04) Adaptive/assistive controls, (specify):
 (05) Fire in vehicle
 (06) Thermal burns
 (07) Rescue or emergency efforts
 (08) Other damage source (specify):
 (95) Damaged, unknown source
 (96) Deployed, unknown if damaged
 (97) Not deployed
 (98) Unknown if deployed
 (99) Unknown
45. Was The Air Bag Tethered? 0
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of tether straps):
 (3) Deployed, unknown if tethered
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 0
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify number of vent ports):
 (3) Deployed, unknown if vent ports present
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 0
 (0) Not equipped/not available
 (1) No
 (2) Yes (specify):
 (3) Deployed, unknown if other occupant contact to air bag
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 0
 (0) Not air bag equipped/air bag not available
 (1) No
 (2) Eyeglasses/sunglasses
 (3) Contact lenses
 (4) Deployed, unknown if eyewear worn
 (7) Not deployed
 (8) Unknown if deployed
 (9) Unknown

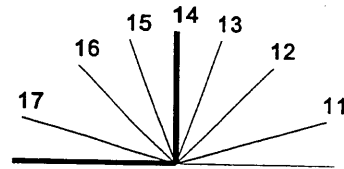
49. Head Restraint Type/Damage by Occupant at This Occupant Position 3
 (0) No head restraints
 (1) Integral—no damage
 (2) Integral—damaged during accident
 (3) Adjustable—no damage
 (4) Adjustable—damaged during accident
 (5) Add-on—no damage
 (6) Add-on—damaged during accident
 (8) Other (specify):
 (9) Unknown
50. Seat Type (this Occupant Position) 06
 (00) Occupant not seated or no seat
 (01) Bucket
 (02) Bucket with folding back
 (03) Bench
 (04) Bench with separate back cushions
 (05) Bench with folding back(s)
 (06) Split bench with separate back cushions
 (07) Split bench with folding back(s)
 (08) Pedestal (i.e., column supported)
 (09) Box mounted seat (i.e., van type)
 (10) Other seat type (specify):
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1
 (0) Occupant not seated or no seat
 (1) Forward facing seat
 (2) Rear facing seat
 (3) Side facing seat (inward)
 (4) Side facing seat (outward)
 (8) Other (specify):
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 9
 (0) Occupant not seated or no seat
 (1) Non-adjustable seat track
- Adjustable Seat Track*
 (2) Seat at forward most track position
 (3) Seat between forward most and middle track positions
 (4) Seat at middle track position
 (5) Seat between middle and rear most track positions
 (6) Seat at rear most track position
 (9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 23

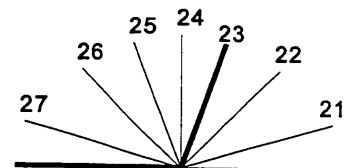
- (00) Occupant not seated or no seat
 (01) Not adjustable

Upright prior to impact

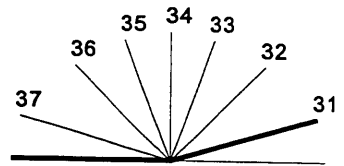
- (11) Moved to completely rearward position
 (12) Moved to rearward midrange position
 (13) Moved to slightly rearward position
 (14) Retained pre-impact position
 (15) Moved to slightly forward position
 (16) Moved to forward midrange position
 (17) Moved to completely forward position

***Slightly reclined prior to impact***

- (21) Moved to completely rearward position
 (22) Moved to rearward midrange position
 (23) Retained pre-impact position
 (24) Moved to upright position
 (25) Moved to slightly forward position
 (26) Moved to forward midrange position
 (27) Moved to completely forward position

***Completely reclined prior to impact***

- (31) Retained pre-impact position
 (32) Moved to rearward midrange position
 (33) Moved to slightly rearward position
 (34) Moved to upright position
 (35) Moved to slightly forward position
 (36) Moved to forward midrange position
 (37) Moved to completely forward position



(99) Unknown

54. Seat Performance (this Occupant Position) _____

- (0) Occupant not seated or no seat
 (1) No seat performance failure(s)
 (2) Seat adjusters failed
 (3) Seat back folding locks or "seat back" failed (specify): _____
 (4) Seat track/anchors failed
 (5) Deformed by impact of occupant
 (6) Deformed by passenger compartment intrusion, (specify): _____
 (7) Combination of above (specify): _____
 (8) Other (specify): _____
 (9) Unknown

CHILD SAFETY SEAT

55. Child Safety Seat Make/Model

(000) No child safety seat

Applicable codes are found in your NASS CDS
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation

(00) No child safety seat

Designed for Rear Facing for This Age/Weight

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

Designed For Forward Facing for This Age/Weight

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage

59. Child Safety Seat Shield Usage

60. Child Safety Seat Tether Usage

Note: Options below applicable to
Variables OA58-OA60.

(00) No child safety seat

Not Designed With Harness/Shield/Tether(01) After market harness/shield/tether
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market
harness/shield/tether added(09) Unknown if harness/shield/tether
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

INJURY CONSEQUENCES61. Injury Severity (Police Rating) 0

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 0

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

Nonfatal

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):

- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 0

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

- (9) Unknown

64. Hospital Stay 00

- (00) Not Hospitalized
- _____ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 00

- _____ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

STOP WORK HERE**VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

TO BE CODED BY THE ZONE CENTER**INJURY CONSEQUENCES**

66. Time to Death 00
 _____ Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)
 (00) Not fatal
 (96) Fatal - ruled disease
 (99) Unknown

67. 1st Medically Reported Cause of Death 00

68. 2nd Medically Reported Cause of Death 00

69. 3rd Medically Reported Cause of Death 00
 _____ Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death
 (00) Not fatal or no additional causes
 (96) Mode of death given but specific injuries are not linked to cause of death. (specify): _____

(97) Other result (includes fatal ruled disease) (specify): _____

(99) Unknown _____

70. Number of Recorded Injuries for This Occupant 00
 _____ Code the actual number of injuries recorded for this occupant.
 (00) No recorded injuries
 (97) Injured, details unknown
 (99) Unknown if injured

TRAUMA DATA

71. Glasgow Coma Scale (GCS) Score 00
 (at Medical Facility)
 (00) Not injured
 (01) Injured - not treated at medical facility
 (02) No GCS Score at medical facility
 (03-15) Code the actual value of the initial GCS Score recorded at medical facility.
 (97) Injured, details unknown
 (99) Unknown if injured

72. Was the Occupant Given Blood? 1
 (1) No - blood not given
 (2) Yes - blood given
 (specify units): _____
 (9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO₃ 00
 (00) Not injured
 (01) Injured, ABGs not measured or reported
 (02-50) Code the actual value of the HCO₃
 (96) ABGs reported, HCO₃ unknown
 (97) Injured, details unknown
 (99) Unknown if injured

BELT USE DETERMINATION

74. Primary Source of Belt Use Determination 2
 (0) Not equipped/not available/destroyed or rendered inoperative
 (1) Vehicle inspection
 (2) Official injury data
 (3) Driver/occupant interview
 (8) Other (specify): _____
 (9) Unknown if belt used

Precinct
Accident No.

DMV
USE

BEST AVAILABLE

19

20

21

22

23

24

25

26

27

28

29

30

USE
COVER
SHEET

K

Accident Date 1/96 Day of Week Time (Military) 1732 No. of Vehicles 02 No. Injured 01 No. Killed 01 Non-Highway Not Investigated at Scene Left Scene Police Photos

VEHICLE 1

VEHICLE 2

BICYCLIST

PEDESTRIAN

Driver Name exactly as printed on license
Address (Include Number & Street)
City or Town State Zip Code

Name exactly as printed on license
Address (Include Number & Street)
City or Town State Zip Code

Date of Birth Sex Unlicensed No. of Occup. Public Property Damaged State of Lic.

Date of Birth Sex Unlicensed No. of Occup. Public Property Damaged State of Lic.

Name exactly as printed on registration

Name exactly as printed on registration

Address (Include Number & Street) Apt. No. Haz. Code Released

Address (Include Number & Street) Apt. No. Haz. Code Released

City or Town State Zip Code

City or Town State Zip Code

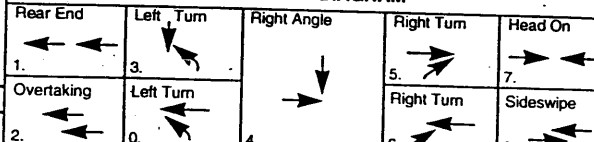
Plate Number State of Reg. Vehicle Year & Make Vehicle Type Ins. Code

Plate Number State of Reg. Vehicle Year & Make Vehicle Type Ins. Code

Check if involved vehicle:
☐ is a commercial motor vehicle;
☐ is more than 95 inches wide;
☐ is more than 34 feet long;
☐ was operated with an overweight permit;
☐ was operated with an overdimension permit.

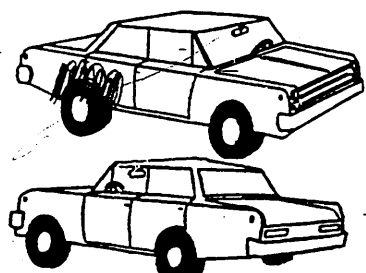
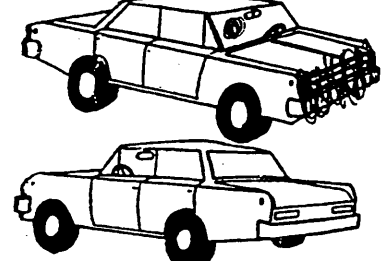
Check if involved vehicle:
☐ is a commercial motor vehicle;
☐ is more than 95 inches wide;
☐ is more than 34 feet long;
☐ was operated with an overweight permit;
☐ was operated with an overdimension permit.

ACCIDENT DIAGRAM



VEHICLE 1 DAMAGE

VEHICLE 2 DAMAGE



☐ No Damage ☐ Undercarriage

☐ No Damage ☐ Undercarriage

Vehicle Towed To

Vehicle Towed To

Location Code

County ☐ Bronx ☐ Kings ☐ Queens ☐ Richmond

Route No. or Street Name

on ☐ Miles ☐ N ☐ E ☐ Feet ☐ S ☐ W of

Ticket/Arrest Number(s)

Violation Section(s)

Complaint No.

Accident Description/Officer's Notes

AT TPO - VEH #1 TRAVELING S/B ON TRAVELING N/B ON ATTEMPTED TO MAKE LEFT TURN ONTO TRAVELING W/B. VEH #1 STRUCK VEH #2 AT INTERSECTION.

ALL INVOLVED	8	9	10	11	12	13	14	15	16	17	18	Names - # Deceased, Give Date of Death
A	1	1	7	1	35	E	X	13	5	2437	7218	SULLIVAN, BERTRUDE
B	1	3	7	1	7	M	1	15	1	1276	7102	SULLIVAN, SALIM
C												
D												
E												
F												
G												

SIGN HERE Officer's Rank and Name Badge No. Department Precinct Post/Sector Reviewing Officer Date/Time Reviewed

PEDESTRIAN/BICYCLIST LOCATION 1. Pedestrian/Bicyclist at Intersection 2. Pedestrian/Bicyclist Not at Intersection	PEDESTRIAN/BICYCLIST ACTION 1. Crossing, With Signal 2. Crossing, Against Signal 3. Crossing, No Signal, Marked Crosswalk 4. Crossing, No Signal or Crosswalk 5. Riding/Walking Along Highway With Traffic 6. Riding/Walking Along Highway Against Traffic 7. Emerging from in Front of/Behind Parked Vehicle 8. Going to/From Stopped School Bus 9. Getting On/Off Vehicle Other Than School Bus 10. Pushing/Working On Car 11. Working in Roadway 12. Playing in Roadway 13. Other Actions in Roadway * 14. Not in Roadway (Indicate) *	TRAFFIC CONTROL 1. None 2. Traffic Signal 3. Stop Sign 4. Flashing Light 5. Yield Sign 6. Officer/Guard 7. No Passing Zone 8. RR Crossing Sign 9. RR Crossing Flashing LT. 10. RR Crossing Gates 11. Stopped School Bus-Red Lights Flashing 12. Construction Work Area 13. Maintenance Work Area 14. Utility Work Area 20. Other *	LIGHT CONDITIONS 1. Daylight 2. Dawn 3. Dusk 4. Dark-Road Lighted 5. Dark-Road Unlighted	ROADWAY CHARACTER 1. Straight and Level 2. Straight and Grade 3. Straight at Hillcrest 4. Curve and Level 5. Curve and Grade 6. Curve at Hillcrest	ROADWAY SURFACE CONDITION 1. Dry 2. Wet 3. Muddy 4. Snow/Ice 5. Slush 0. Other *	WEATHER 1. Clear 2. Cloudy 3. Rain 4. Snow 5. Sleet/Hail/Freezing Rain 6. Fog/Smog/Smoke 0. Other *	WHICH VEHICLE OCCUPIED 1. Vehicle No. 1 2. Vehicle No. 2 B. Bicyclist P. Pedestrian O. Other *	POSITION IN/ON VEHICLE 1. Driver 2-7. Passengers 8. Riding/Hanging on Outside	SAFETY EQUIPMENT USED 1. None 2. Lap Belt 3. Harness 4. Lap Belt/Harness 5. Child Restraint Only 6. Helmet 7. Air Bag Only 8. Air Bag/Lap Belt 9. Air Bag/Harness A. Air Bag/Lap Belt/Harness B. Air Bag/Child Restraint 0. Other *	EJECTION FROM VEHICLE 1. Not Ejected 2. Partially Ejected 3. Ejected	AGE 11 SEX M/F 12 INJURED TAKEN 13 BY TO 18	APPARENT CONTRIBUTING FACTORS HUMAN 2. Alcohol Involvement 3. Backing Unsafely 4. Driver Inattention * 5. Driver Inexperience * 6. Drugs (Illegal) 7. Failure to Yield Right-of-Way 8. Fell Asleep 9. Following Too Closely 10. Illness 11. Lost Consciousness 12. Passenger Distraction 13. Passing or Lane Usage Improper 14. Pedestrian's/Bicyclist's Error/Confusion 15. Physical Disability 16. Prescription Medication 17. Traffic Control Disregarded 18. Turning Improperly 19. Unsafe Speed 20. Unsafe Lane Changing 40. Other Human *	VEHICULAR 41. Accelerator Defective 42. Brakes Defective 43. Headlights Defective 44. Other Lighting Defects 45. Oversized Vehicle 46. Steering Failure 47. Tire Failure/Inadequate 48. Tow Hitch Defective 49. Windshield Inadequate 60. Other Vehicular * ENVIRONMENTAL 61. Animal's Action 62. Glare 63. Lane Marking Improper/Inadequate 64. Obstruction/Debris 65. Pavement Defective 66. Pavement Slippery 67. Shoulders Defective/Improper 68. Traffic Control Device Improper/Non-Working 69. View Obstructed/Limited 80. Other Environmental *	DIRECTION OF TRAVEL 	PRE-ACCIDENT VEHICLE ACTION 1. Going Straight Ahead 2. Making Right Turn 16. Making Right Turn on Red 3. Making Left Turn 17. Making Left Turn on Red 4. Making U Turn 5. Starting from Parking 6. Starting in Traffic 7. Slowing or Stopping 8. Stopped in Traffic 9. Entering Parked Position 10. Parked 11. Avoiding Object in Roadway 12. Changing Lanes 13. Overtaking 14. Merging 15. Backing 20. Other *	LOCATION OF FIRST EVENT 1. On Roadway 2. Off Roadway	TYPE OF ACCIDENT COLLISION WITH 1. Other Motor Vehicle 2. Pedestrian 3. Bicyclist 4. Animal 5. Railroad Train 10. Other Object (Not Fixed) * COLLISION WITH FIXED OBJECT 11. Light Support/Utility Pole 12. Guide Rail 13. Crash Cushion 14. Sign Post 15. Tree 16. Building/Wall 17. Curbing 18. Fence 19. Bridge Structure 20. Culvert/Head Wall 21. Median/Barrier 22. Snow Embankment 23. Earth Embankment/Rock Cut/Ditch 24. Fire Hydrant 30. Other Fixed Object * NON-COLLISION 31. Overturned 32. Fire/Explosion 33. Submersion 34. Ran Off Roadway Only 40. Other *	VEHICLE 1 19 VEHICLE 1 20 VEHICLE 2 21 VEHICLE 2 22 VEHICLE 1 23 VEHICLE 2 24 VEHICLE 1 25 VEHICLE 2 26 First Event 28 Vehicle 1 29 Vehicle 2 30 COVER SHEET K
--	--	--	--	---	---	---	--	---	--	--	--	--	--	--------------------------------	--	---	--	---

BEST AVAILABLE

REPORT OF AUTOPSY

Name of Decedent:

M.E. Case #: M96-3090

Autopsy Performed by:

Date of Autopsy: 1996

FINAL DIAGNOSES

- I. BLUNT IMPACT CERVICAL TRAUMA WITH NEAR COMPLETE TRANSECTION OF NECK:
 - A. GAPING ANTERIOR NECK LACERATION WITH SUPERIOR AND INFERIOR MARGINAL ABRASION.
 - B. OCCIPITO-ATLANTO DISARTICULATION.
 - C. SCANT SUBARACHNOID HEMORRHAGE, DIFFUSE.
 - D. TRANSECTION OF ALL BLOOD VESSELS, NERVES, LARYNX, POSTERIOR PHARYNX AND SOFT TISSUES OF MID- TO UPPER NECK.
- II. BLUNT IMPACT HEAD TRAUMA:
 - A. VERTICAL LINEAR SUPERFICIAL ABRASIONS OF FOREHEAD AT HAIRLINE.
 - B. RIGHT OCCIPITO-PARIETAL SUBSCALPULAR CONTUSION.
- III. PETECHIAE ON ANTERIOR ASPECTS OF BOTH LUNGS.

CAUSE OF DEATH:

TRANSECTION OF NECK BY COVER OF AIR BAG COMPARTMENT DURING INFLATION OF AIR BAG FOLLOWING MOTOR VEHICLE COLLISION {RIGHT FRONT SEAT PASSENGER}.

MANNER OF DEATH: ACCIDENT.

REPORT OF AUTOPSY

CASE NO. M96-3090

I hereby certify that I, _____, City Medical Examiner - II, have performed an autopsy on the body of _____ on the _____ day of _____ 1996, commencing at 3:00 PM, in the _____ of the Office of Chief Medical Examiner of the _____ This autopsy was performed in the presence of _____.

EXTERNAL EXAMINATION:

The decedent is initially viewed clad in a black nylon bomber jacket, green blue and white striped shirt, white T-shirt, maroon thermal undershirt, blue jeans with a black belt, boxer shorts with maroon stripes and two black sneakers. Examination of the clothing reveals blood staining with no defects, tears or patterned imprints.

The body is that of a well developed well nourished 4', 55 lb Black male whose appearance is consistent with the reported age of 8. Muscular rigidity is symmetric and lividity is absent in the cool body.

The scalp is covered by curly black hair approximately 1 1/2" in length. The brown irides have clear corneae. Bulbar and palpebral conjunctivae are free of petechiae. The lips are atraumatic, free of contusion or laceration. The gingivae are atraumatic. Natural dentition is intact and unremarkable.

The chest is symmetrical. The abdomen is free of penetrating trauma. The external genitalia are those of an infant circumcised male. Examination of the lower extremities is unremarkable and examination of the upper extremities reveals no trauma. The back is atraumatic with a vertically oriented 4" dark fine linear scar on the right side. No trauma is on the back.

Patchy abrasions are identified over the posterior aspects of both pinnae.

The tongue is free of superficial or deep contusion or laceration.

EVIDENCE OF INJURY:

BLUNT IMPACT CRANIO-CERVICAL TRAUMA:

A. Transection of Neck:

When the decedent is initially viewed a near complete decapitation injury is observed. The gaping transection defect is 4" side {transverse dimension} and has a circumferential length of approximately 7 1/2". The transection extends through the upper neck, approximately at the level of the prominence of the thyroid cartilage. A broad band of abrasion extends from the edge of the mandible and through the submental skin toward the superior wound margin with some sparing of the skin immediately adjacent to the superior margin of the wound; the area of abrasion broadens over the angle of the right mandible and extends up to the right earlobe, up to a width of approximately 2 1/2", with the midline area of abrasion approximately 1". The lower wound margin is abraded between 1/2" to 1 1/2" from the skin margin; the broadest area of abrasion is noted at the right angle of the wound. The wound terminates in the posterolateral neck leaving a broad strip of intact muchal skin 1 3/4" in width preserving the attachment of the head to the torso. No abrasions are on the nuchal skin flap.

The wound consists of a near complete decapitation with complete transection of all soft tissues, vessels, nerves, larynx, posterior pharynx and posterior paraspinal musculature. Complete occipito-atlantal disarticulation is noted. Inspection of the atlas {C1} and axis {C2} reveals them to be atraumatic with the odontoid peg being intact. The larynx is transected through the body of the thyroid cartilage with the superior portion being retained in the submental soft tissue.

When the scalp is reflected a 1/4" right occipito-parietal subscalpular contusion is identified. The scalp is otherwise atraumatic. The calvarium is of normal thickness and free of fractures. The dura strips readily from the overlying cranial vault and no epidural or subdural collections of blood or other fluids are present. The 1100 gm brain is covered by glistening transverse leptomeninges and diffuse scant subarachnoid blood is noted. The brain is symmetrical. The gyri are of normal width and the sulci are of normal depth. On cross section no focal lesion of the cerebral hemispheres or cerebellum are present. An anterior partial avulsion of the pontomedullary junction is noted. The base of the skull is free of fractures.

B. Blunt Impact Trauma of Forehead:

A 1 1/2" x 1 1/4" vertically oriented area of vertical linear superficial abrasions is identified in the forehead at the hairline.

INTERNAL EXAMINATION:

GENERAL: The subcutaneous tissues are well hydrated. The skin is reflected in the anterior torso and no subcutaneous contusions are present. The skeletal muscle of the chest is unremarkable. No free blood is identified in the autopsy.

The organs are in their normal anatomical situs. The pleural, pericardial and peritoneal cavities are free of excess fluid, blood or adhesions.

CENTRAL NERVOUS SYSTEM: The 100 gm heart has a smooth glistening epicardial surface. The endocardial vasculature is unremarkable. The heart is empty. Dissection of the heart reveals no structural abnormalities or traumatic lesions of the atria, ventricles or septa. The endocardial surfaces and valves are unremarkable. The aorta is without note.

RESPIRATORY SYSTEM: The 90 gm right lung and 80 gm left lung have smooth pleural surfaces with normal lobation. Scattered pink petechiae are on the anterior and lateral surfaces of the lungs. On cross section the pulmonary parenchyma is spongy, pink and free of consolidation or mass. The vascular tree is free of thromboembolus. The airways are atraumatic.

DIGESTIVE SYSTEM: The esophagus and stomach are unremarkable. Gastric contents consist of approximately 30 cc of pale cream paste. Examination of the remainder of the small and large bowel is without note. The vermiform appendix is present.

LIVER, GALLBLADDER AND PANCREAS: The 710 gm liver has a smooth capsular surface. On cross section no focal lesions are present. The unremarkable gallbladder contains approximately 5 ml of yellow green bile. The extrahepatic biliary tree is unremarkable. The pancreas is free of focal contusion or mass.

HEMOLYMPHATIC SYSTEM: The 50 gm spleen has a wrinkled capsular surface. On cross section no focal lesions are present. The lymph nodes are prominent {consistent with age} but are grossly unremarkable. The thymus is present and is unremarkable.

GENITOURINARY SYSTEM: The 50 gm right kidney and 50 gm left kidney have smooth subcapsular surfaces. On cross section no focal lesions are in the renal cortex, medulla or pelvic calyceal systems. The ureters are of normal caliber. The urinary bladder contains approximately 70 cc of pale yellow urine. The testes are atraumatic.

M.D.

City Medical Examiner - II

/96:dr

'96:pc

1/96

TOXICOLOGY LABORATORY

SIGNED: Leanne Stojin DATE '96
DIRECTOR OF LABORATORY